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AUTHOR Busselle, Tish Newman
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ABSTRACT

According to the weighted pupil philosophy, the essence of equal educational opportunity is not in providing equal amounts of funds for the education of each child, but in providing the varying amounts of funds needed to insure a financial basis for giving each child an equal opportunity to obtain an education which meets his needs. This paper attempts to document, analyze, and evaluate the methodology used and the procedures followed in the development of a weighted pupil method for financing Texas public schools. The paper purports to provide substantive information about issues addressed, staff organization, working procedures, and the collection and analysis of data in order that another State considering the development of a weighted student approach to the distribution of funds for public school education might have the benefit of the Texas experience. (Author)

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THE TEXAS WEIGHTED PUPIL STUDY

by

Tish Newman Busselle

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INTRODUCTION

On December 23, 1971, a three judge U.S. District Court in San Antonio ruled that the Texas system of financing public school education did not meet the guarantees of the equal protection clause of the Fourteenth Amendment to the United States Constitution or comply with the sections of the Texas Constitution and Education Code regarding the provision of public school education in Texas. The decision culminated several years of litigation in Texas courts during which several challenges were made of the Texas public school finance system including methods used in determining property values for tax purposes, and the acquisition and distribution of revenues. In their decision, the judges gave the defendants, including the State Board of Education and the Texas legislature, two years in which to "take all steps reasonably feasible to make the school system comply with the applicable law; and without limiting the generality of the foregoing, to reallocate the school funds, and to otherwise restructure the taxing and financing system so that the educational opportunities afforded the children attending Edgewood Independent School District, and the other children of the State of Texas, are not made a function of wealth other than the wealth of the State as a whole...."[1]

1/ U.S. District Court, Texas (Western District). Demetrio P. Rodriquez, et al. v. San Antonio Independent School District, et al. (San Antonio, 1971), p. 9.

Although the Rodriquez decision dealt with the inequities in the Texas school finance system which enabled school districts to raise unequal revenues for similar efforts because of variances in property wealth, the major studies which were undertaken in Texas to provide acceptable alternatives to the existing system had broader parameters than the taxation system. All aspects of public school finance including both the acquisition and distribution of revenues, issues of local control, and school district reorganization were given close scrutiny in the most extensive study of Texas school finance since the existing Foundation School Program was implemented in 1949.

From the outset, the Texas State Board of Education, composed of 21 members elected for staggered terms, sought to have the broadest possible input into the financing plan for which it assumed responsibility for developing. In addition, the Board also promulgated four ideas which it thought should be basic to any plan which was suggested. These were:

1. Guaranteed funding of the state's share of basic educational opportunity for all children must continue to be a key element of any school finance plan.

2. Local taxes should continue to be used in the district collected. The capability of each local district to enhance and enrich its own program above the state basic program must be preserved.

3. The control of the local district and the administration of such funds available to that district should be vested in the citizens residing within that district, retaining the concept that decisions are best when made as close to those affected as practicable. This will require responsible district organization and financial structure.

4. The allocation of state funds shall give consideration to the ability of the local school district to provide local tax and other revenues.[2]

The State Board of Education appointed a Committee on Public School Finance from its own membership and chaired by the Board Chairman to bring recommendations to the full Board about changes needed in the entire Texas public school financing system. During its deliberations, the staff of the Texas Education Agency-- the state department of education--did substantive work for the Committee.

Soon after the Committee was appointed in February 1972, the members decided that their initial deliberations would focus on the scope of the educational program to be financed, the cost of the program and the distribution of funds to school districts to support the program. Three staff studies were initiated to provide various approaches to considering recommendations to be made in these areas. Each of the studies was conducted independently from the others with progress reports made bi-weekly to the Management Task Force chaired by the Deputy Commisioner of Education and composed of the Associate Commissioner for Planning, the Assistant Commissioner for Administration, the Assistant Commissioner for Urban Education, the Director of Internal Management, and two special school finance consultants to the Agency. Each of the three Associate and Assistant Commissioners were in charge of one of the studies which were undertaken. The Associate

2/ Texas State Board of Education. Statement of Principles for the Development of a School Finance Plan. Austin, Texas, February 12, 1972, pp. 1-2.

Commissioner for Planning had management responsiblility for examining, updating and costing the recommendations made in 1968 by the Governor's Committee on Public School Education. The majority of the wide-ranging recommendations of this blue ribbon panel of Texas citizens had not yet been considered by the Legislature. Therefore, the purpose of the staff study was to summarize the recommendations and update the costs of implementing each of them in order that the Board Committee might evaluate them and their possible contribution to its own recommendations.

The second staff study focused on changes that might be made in the existing Fouucation School Program to bring it more in line with actual practices in Texas' 1149 school districts. This study was directed by the Assistant Commissioner for Administration whose department had been administering the distribution of State funds under the Foundation School Program since its inception in 1949. Since the Foundation School Program which exists in Texas is based on classroom units with funds for personnel and operating expenses disbursed to districts according to their units, the study prepared by the staff examined the effects and costs of allocations based on different pupil-teacher and pupil-professional ratios and on the funds provided for operating expenses, transportation and other ancillary services. For the most part, the recommendations contained in this study would have changed the Foundation School Program so that it would more nearly reflect the average practices of Texas school districts. Recommendations included reducing the pupil-classroom teacher ratio,

providing more professional units per classroom teacher unit, and increasing the allotments for transportation and current operations. In addition, the study recommended that State support of $100 per educationally disadvantaged child be provided in addition to the Federal funds currently available.

The third approach to the distribution of funds, prepared by the Office of Urban Education for examination and evaluation by the Board Committee, was a weighted pupil method for financing public schools. This approach was largely patterned after the methodology developed by the National Educational Finance Project in its work since 1967. The underlying tenet of this approach is the recognition that it costs varying amounts of money to meet the differing educational needs of students and, that the distribution of funds should be based on meeting these different needs. According to the weighted pupil philosophy, the essence of equal educational opportunity is not in providing equal amounts of funds for the education of each child, but in providing the varying amounts of funds needed to insure a financial basis for giving each child an equal opportunity to obtain an education which meets his needs.

This paper attempts to document, analyze and evaluate the methodology used and the procedures which were followed in the development of a weighted pupil method for financing Texas public schools. It is a further expansion of the report of the staff study, A WEIGHTED PUPIL APPROACH TO PUBLIC SCHOOL FINANCE: ONE ALTERNATIVE, which was prepared for the Board Committee. The

major purpose of this paper is to provide substantive information about issues addressed, staff organization, working procedures, and the collection and analysis of data in order that another state considering the development of a weighted student approach to the distribution of funds for public school education might have the benefit of the Texas experience.

THE WEIGHTED PUPIL METHODOLOGY

A weighted pupil approach to the distribution of funds among districts to support public school education has gained widespread support in recent years as a viable alternative to existing finance systems which are based on providing essentially equal funds for the education of each student. The latest refinement of a weighted pupil financing alternative was developed during the National Educational Finance Project (NEFP) study. Although the purposes of the NEFP study were manifold and the findings extensive, this chapter will be limited only to a discussion of the weighted student distribution methodology which was developed and piloted in the study.[3]

The weighted pupil methodology, as develped by the NEFP staff and special consultants to the study and applied in Texas, was based on the fundamental assumption that "equality of educational opportunity amorg individuals will result in variation of inputs and costs." And furthermore, that these cost differences must be taken into account in developing a finance system to support the provision of equal educational opportunities.[4]

The procedures outlined by the NEFP staff in designing a support system encompassing differential costs for students with

3/ For a discussion of other finance issues examined during the NEFP study, see the National Educational Finance Project, Alternative Programs for Financing Education, Volume V, 1971.

4/ William McLure and Andra Pence. Early Childhood and Basic Elementary and Secondary Education. NEFP Special Study No. 1, 1970, p. 85.

different needs include the following. First, the per pupil costs of providing for needs in selected program areas must be determined by identifying all of the current operating expenditures which can be associated with each program area and then dividing those totals by the numbers of students who are served by the programs. Program areas included in the NEFP study were Early Childhood Education, Basic Elementary and Secondary Education, Special Education, Compensatory Education, and Vocational Education. Twenty-eight districts located in different parts of the United States were used in establishing per pupil costs in each program area included in the NEFP study. These districts were selected by NEFP consultants as having "unique programs designed to meet special educational needs."[5]

Second, the per pupil costs which have been established can be expressed as indices of the per pupil cost of one program area which is assigned the base value of 1.0. For example, if it is determined that the cost of providing educational programs and services for a student enrolled in a regular elementary program is $300 and it costs $450 per pupil for a middle school program, this latter cost can be reflected as an index of 1.5 if the elementary cost is assigned 1.0. This is calculated in the following way:

$$\frac{\$450}{\$300} \times 1.0 = 1.5$$

Once the weights for the other program areas are computed, then it is possible to determine the total cost of a program or of

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5/ Ibid, p. 2.

a district's programs by multiplying the number of students in each population group by their respective weights and multiplying the total weighted amount by the dollar value for 1.0. Per pupil weights can also be expressed as instructional unit weights using the same procedures.

In the NEFP study, the index or weight of 1.0 represented the per pupil cost for the regular elementary program. The other NEFP weights were:

TABLE I: NEFP PER PUPIL WEIGHTS BY PROGRAM AREA[6]

PROGRAM AREA	WEIGHT
Basic Early Childhood	
3 yr. olds	1.40
4 yr. olds	1.40
Kindergarten	1.30
Basic Elementary and Secondary	
Grades 1-6	1.00
7-9	1.20
10-12	1.40
Special and/or Exceptional	
Mentally Handicapped	1.90
Physically Handicapped	3.25
Emotionally Handicapped	2.80
Special Learning Disorders	2.40
Speech Handicapped	1.20
Vocational-Technical	1.80
Compensatory Education	
Low Income	2.06

The weighted pupil system can also be used to determine the distribution of a fixed amount of revenues (appropriations) by dividing the total amount of funds available by the total weighted

6/ National Educational Finance Project. NEFP Decision Process: A Computer Simulation. 1971, p. 48.

student population to be served which yields a dollar value for 1.0. The dollar value for 1.0 can then be applied to each district's weighted student total in order to determine the amount of funds which each district should receive.

A weighted student approach to the distribution of funds is advocated by the NEFP staff as serving "to improve the rationality in such a complex enterprise as public education and to provide methods for achieving the goal of equal educational opportunity for every child in America."[7] These two considerations were basic to the development of a weighted pupil allocation method for Texas which is discussed and evaluated in the remaining sections of this paper.

7/ Alternative Programs for Financing Education, p. 170.

THE TEXAS APPLICATION

Scope of the Study

The major purpose of the application of a weighted pupil approach to financing Texas public schools was to develop a finance alternative based on the costs of providing equal and quality educational programs to students with a wide range of educational needs. As stated in the report of the Texas study, the objectives of the undertaking were threefold.

> First, it was to determine what the costs of providing various kinds of educational opportunities are. Second, it was to determine how much money would be needed to finance all Texas public school districts at a "quality" level. Third, it was to determine which Texas school districts would require more money and which less than they spent in 1970-71 if allocations were based on the provision of educational programs to meet the needs of the student population.[8]

The methodology followed in realizing these objectives was largely based on procedures and processes developed by the staff of the National Educational Finance Project directed by Dr. Roe Johns. The NEFP staff assisted the Texas staff in the formulation of the operational plan for its five month study and in the analyses of the data which resulted.

The major constraints in developing a weighted pupil approach to the distribution of funds for education in Texas

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8/ Office of Urban Education, Texas Education Agency. A Weighted Pupil Approach to Public School Finance: One Alternative. September 1972, p. 1.

recognized at the initiation of the study was the shortness of time available to complete the study for the Board Committee and the lack of data readily available in the form needed to compute a set of weights for Texas and to apply the weights to different student populations to ascertain total program costs. Throughout the study, some adaptations in the National Educational Finance Project methodology had to be made because of these constraints. These adaptations are discussed within the context in which they were made.

A large number of Texas Education Agency personnel contributed to the study during its five months. In total, about 30 Agency staff members worked on the project in several different capacities and for varying lengths of time. Their help was used in those phases of the study which particularly involved the areas in which they normally worked. All phases of the work were directed by the the two professional staff members of the Office of Urban Education who served as study coordinators and who were responsible for most of the decisions made in connection with the study.

Due to both the shortness of the timeframe in which the study was to be completed and the large number of personel who would be engaged in different parts of the study, a plan detailing the various phases to be encompassed by the study was developed. The purpose of the plan was to display graphically the relationships between the individual tasks and the entire project and the interdependencies among the tasks whose fulfillment was crucial

to completion of the study.[9] The plan with an accompanying task assignment chart were used throughout the study in several important ways. The plan was used to display the total scope of the study as well as the individual phases to orient those who were to work on different parts of the study as well as others who were not directly involved in the operationalizing of the study but who were called upon to make recommendations during its course. An example of the latter group was the Management Task Force which served as the link between the three staff distribution studies and the State Board's Committee. The plan was also used daily by the study coordinators as a management tool to ensure that the necessary linkages between different tasks occurred in a timely fashion.

It was envisioned initially that the study would involve seven major phases. These were (1) the selection of the educational program to be supported by this funding method; (2) the selection of good practice districts on which to base cost determinations; (3) the determination of a set of pupil weights for Texas; (4) the gathering of needed school population data; (5) the analysis of the distribution of funds under a weighted pupil approach; (6) the development of suggested guidelines to be used in administering a funds distribution plan in Texas based on weighted students; and (7) the development of a written report documenting the procedures which were followed in the study, detailing the analyses which were made, and summarizing the recommendations which

9/ This time-related activity chart is Appendix A of this paper.

resulted. All but one phase-- the development of suggested guidelines--were completed as originally planned. The details and products of each phase are discussed below.

Phase I: Determination of the Scope of the Educational Program

The initial step in determining a set of pupil weights for Texas was to specify which program areas would be weighted. Recommendations about which program areas to include were solicited from each of the Assistant and Associate Commissioners of the Texas Education Agency. Their recommendations were then presented to the Board Committee, who on June 16, 1972, approved the following program areas for inclusion in the weighted student approach to funding Texas public school education.

Kindergarten
Elementary, 1-6
Middle School, 7-9
High School, 10-12
Vocational Education:
  Cooperatives
  Homemaking
  Agriculture
  Trades and Industries
  Handicapped
  Coordinated Vocational Academic Education
  Distributive Education, Vocational Office Education, and Health Education
Special Education:
  Speech Handicapped
  Early Childhood
  All other programs
Adult Basic Education
Programs for Special Populations:
  Low Income
  Non-English Speaking
  Migrant
  Gifted and Talented

With the exception of adult vocational education, which the Board Committee eliminated, the list represented all areas recommended by the staff for inclusion in the study.

Staff recommendations about areas to be included were based both on traditional areas of state support in Texas such as basic education programs, and vocational and special education, and on areas in which it was felt that State support should be forthcoming such as adult basic education and programs for non-English speaking and gifted students. Programs for low income and migrant students which have been traditionally supported with Federal funds were also included because of the uncertainty about the future level of Federal support and the possibility of increased state responsibility for determining district allocations which has been suggested in the special education revenue sharing proposals of the Nixon Administration.

Individual meetings were held with the Associate Commissioner for Occupational Education and Technology, the Assistant Commissioner for Teacher Education and Certification (who is responsible for program development for the regular kindergarten-grade 12 program), the Assistant Commissioner for Administration (who administers Federal funds to support special programs for low income and migrant students), the Assistant Commissioner for Special Education and Special Schools, and the Assistant Commissioner for Bilingual Education to get their recommendations.

Once the broad areas to be included in the scope of the study were selected, consideration was given to how many and which

individual program areas would be weighted. The first area of discussion involved whether or not to establish multiple weights for the regular program. Kindergarten was given a separate identity immediately because it was being phased into Texas public schools. If not treated separately in determining cost differentials, the regular program differentials would be based on cost information from districts which were in different phases of kindergarten program implementation. It was felt that this would cause major discrepancies in the weights between districts. It was also recommended that multiple weights be determined for the regular program, grades 1-12, to ensure that differentiated program costs between elementary, middle and high school programs would be reflected where they existed. Based on both previous Texas and the NEFP experience, it was believed that the costs of middle and high school programs would be higher than those associated with elementary programs because of the lower pupil-teacher ratios and higher salaries for degrees and experience ususally found in the upper grades. In determining which grade levels would be encompassed by the elementary, middle and high school weights, the organizational pattern most prevalent in Texas schools of grades 1-6, 7-9, and 10-12, respectively, was recommended.

Weights for five handicapping conditions-- mentally handicapped, emotionally handicapped, physically handicapped, speech handicapped, and special learning disorders-- were established in the NEFP study. This particular categorization did not parallel either the conceptualization or the operation of special education

programs in Texas. Although it was recognized that establishing only one special education weight might penalize districts offering higher cost programs for educating severely handicapped children, it was felt that one weight would be more appropriate for Texas' new approach to providing comprehensive educational programs for exceptional students. This approach, known as Plan A and to be fully implemented by 1976, provides State financial support for flexible instructional services and organizational patterns designed to meet the individual needs of each child, regardless of his handicapping condition. Under Plan A, funds will no longer be allocated on the basis of handicapping condition or on the number of classroom units to serve groups of children with similar handicaps. Instead, each Plan A district receives personnel units-- teachers, aides and non-teaching professionals-- and funds for materials, special equipment and diagnostic work based on its total ADA for the preceding school year. To date, Plan A support using these formulae has been substantial enough that all districts who have been funded under this distribution system have been able to expand their special education services.

Two exceptions were made to determining only one weight for special education. It was felt that separate weights should be established for children participating in speech handicapped programs and for three and four year olds who are in special education early childhood education programs. A separate weight for speech handicapped was recommended to the Board Committee because services to meet the needs of speech handicapped children

cost considerably less than services to meet the educational needs of students with other handicapping conditions. Including speech handicapped students, personnel and costs in the determination of a weight for special education would tend to level down the special education weight because of their low cost and the large number of students involved. An identifiable weight was also established for special education early childhood programs because the few existing programs were pilot endeavors which may be either expanded or substantially changed during the next few years.

Only one weight was established for vocational education in the NEFP study. It was recognized by both the NEFP and the Texas staffs that funding on the basis of only one weight for vocational education programs would tend to encourage districts to offer only lower cost vocational programs to their students rather than ones which, regardless of cost, would meet both the needs of their students and the vocational training needs of their communities.

Consideration was given to grouping vocational education programs by traditional areas of division and by areas according to similar cost levels. Vocational program directors in the Agency argued that establishing separate weights for the different vocational areas as traditionally identified would result in a funds imbalance similar to that which would occur if only one weight for vocational education were used. This would result because of the wide cost variations within each of the areas of Trades and Industries, Vocational Office Education, Health Occupations,

Agriculture, Homemaking, and Distributive Education. For example, each of the above areas has lower cost programs such as cooperative training which involve on-the-job experience as well as higher cost Coordinated Vocational Academic Education programs which are highly individualized for underachieving potential dropouts.

It was recommended to the Board Committee that vocational education program areas be broken down according to cost levels rather than strict program area clusters for establishing weights. Accordingly, separate weights were recommended for the following vocational areas: cooperative programs; homemaking programs, agriculture programs; shop programs; handicapped vocational programs; coordinated vocational academic education programs; distributive education, vocational office education, ahd health education programs; and adult basic and adult vocational education programs.

Phase II: Selection of Good Practice Districts

Since Texas cost differentials were to be based on the costs of providing quality programs to meet the varying educational needs of Texas students in the areas encompassed by the Scope of the Educational Program, described on page 14 of this paper, procedures were established to identify those Texas districts which had quality programs. Quality, an elusive term for both educators and laymen, was defined in terms of existing best practices. The following criteria were established for identifying best practice districts:

". The district provides outstanding or very high quality kindergarten and general education programs for grades 1-12.

. The district provides high quality, comprehensive vocational, special, and adult education programs.

. The district meets the educational needs, in an outstanding way of low income, non-English speaking, migrant and gifted students."[10]

These criteria, however, did not suggest any specific means of measurement of either quality or best practices besides human judgement, so attempts were made to select nominators who were in a position to possess knowledge about the practices of a large number of districts which would give them a basis for judging which were best. The group of nominators which was selected was comprised of both Agency program managers and the Directors of the twenty regional Education Service Centers in Texas.

Agency nominators were asked to nominate thirty districts which, in their estimation, exhibit best practices according to the criteria given above. Two Agency nominators were asked to nominate comprehensive best practice districts while the other four nominators were asked to make thirty nominations in the program areas for which they had administrative responsibility. The Agency nominators and the areas in which they made nominations were:

TABLE II: NOMINATORS AND AREAS OF NOMINATIONS FOR TEXAS BEST PRACTICE DISTRICTS

Agency Nominator	Area of Nomination
Assistant Commissioner for Administration	Comprehensive Best Practices
Director of Accreditation	Comprehensive Best Practices
Assistant Commissioner for Bilingual and International Education	Programs for Non-English Speaking Students

10/Office of Urban Education, op. cit., p. 14.

TABLE II CONTINUED,

Agency Nominator	Area of Nomination
Associate Commissioner for Occupational Education and Technology	Vocational Education Adult Vocational Education[11] Adult Basic Edcation
Assistant Commissioner for Teacher Education and Certification	Kindergarten Elementary Education Middle School Education High School Education
Assistant Commissioner for Special Education and Special Schools	Special Education Special Education Early Childhood Education

It was decided not to obtain individual sets of nominations for best practices in meeting the needs of low income, migrant, and gifted and talented students, respectively, but rather to include them in the nominations for best practices in the regular programs--kindergarten, elementary, middle, and high school.

The instructions which were sent to the Agency nominators are Appendix B of this paper. Although nominators were advised that the primary criterion for nominating a district should be "best practice", they were also asked to include districts of various sizes and locations in their nominations if possible. In order to achieve some geographic distribution among districts which were nominated, each Education Service Center Director was asked to nominate five districts from within his region which he considered to exhibit "comprehensive best practices" according to the criteria reported earlier. Requests for these nominations were made in writing and obtained by telephone one week later.

11/ The area of adult vocational education was included in the nomination process even though the Board eliminated it from the study because the Board Committee was unable to meet until after the nomination process was completed.

One hundred sixty eight of Texas' 1149 school districts received nominations in one or more areas. Although the maximum number of nominations any one district could receive was thirteen, no district received more than ten nominations and 48 percent of the districts nominated received only one nomination each. A matrix was designed to display the districts nominated and the areas in which they received nominations. Each nomination was treated equally. The Management Task Force was asked to designate the thirty districts to be used in determining a set of pupil weights for Texas. All 26 districts which had five or more nominations were selected based on the number of nominations they received. Five other districts, for a total of 31, were chosen from the group of 31 districts which had received three or four nominations. The selection of the five was based on their size, geographic location, and the areas in which they were nominated in order to achieve the widest representation among the districts to be used in determining cost differentials.

The thirty-one districts which were selected for the weighted pupil cost study were designated "good practice" rather than "best practice" districts because of the recognition that slight changes in either the nomination process or the personnel who made the nominations might have produced a substantially different list of districts. Once the good practice districts were selected, further analyses of them were done to provide an overview of their geographic distribution and differences in their size and revenue to be used on the written and oral presentations of the study. These analyses are contained in the

written report of the study.[12]

Phase III: Determining a Set of Pupil Weights for Texas

While the good practice districts to be used in establishing Texas weights were being nominated, decisions were made about procedures for gathering the pupil, personnel and cost data needed to calculate the weights. Major decisions involved both cost data acquisition and the calculation of weights.

Initially, it was planned that cost data would be collected on-site in each good practice district. It was estimated that it would take two Agency staff members working from 3-5 days in each district to get the necessary data. Sufficient staff to accomplish this within a three week timeframe did not exist within the Agency. Another primary deterrent was the burden that would be placed on the districts at a time when many of their staff members were either involved in preparing year-end reports or taking summer vacations. After reviewing the data requirements with those in the Agency responsible for Statewide data collection, it was decided that the needed data could be obtained in-house from existing reports filed by all districts. This procedure was followed for 24 of the good practice districts. Data for the other seven districts, the largest districts in the study, were gathered and submitted by staff members from each of the districts who received joint training prior to beginning their work. Data were gathered on-site in these seven districts in order to evaluate to what

12/See A Weighted Pupil Approach to Pupil School Finance: One Alternative, pp.10-11.

extent it was possible to retrieve the needed information from local district files, to determine the time and manpower needed to do it, and to ascertain if better data were available at the district level than in State collections. It was intended that results of the local collection process would serve to establish the validity of the weights as well as establish a basis for making recommendations about procedures to be used if the cost study were repeated.

The major problem confronted in the cost data acquisition phase involved the selection of sources to be used. Although substantial progress had been made in Texas during recent years to upgrade the quality of district level data which was reported by districts and to merge duplicate data requests into one format, it was found that several sources for the same data elements still existed. Before the actual data gathering was begun, the source for each data item was identified. Different responses to similar data requests seemed dependent primarily on the use to be made of the data requested. Where several sources of information existed for the same data item, the advice of Agency staff members most familiar with Agency data collections was solicited and followed in choosing the source to be used on the study. In addition, during this time, two of the programs for which weights were to be established were eliminated from the study because of the lack of data on students, staff, salaries, and other costs. These two areas were adult education programs and programs for gifted and talented students.

The other major decision made prior to beginning the actual collection of data concerned whether the weights for special programs would be expressed as the total costs of educating a student with a particular need or as adjustments (add-ons) to the regular education weights. For example, a weight for a student enrolled in a cooperative vocational program could be established to reflect the costs of providing both the cooperative program and the regular high school program or only the additional cost of the cooperative program. In order to determine a weight which accurately reflected both regular and special program costs (the former above), it would be necessary to be able to ascertain how much time was spent in each of the respective programs in order to establish full-time equivalencies(FTEs). It was concluded that establishing full-time equivalencies for two of the special program areas--special education and programs for the non-English speaking, low income, migrant and gifted-- was impossible because of the wide range of organizational patterns and instructional strategies found within each specific program area. For example, some special education students attend regular classes and receive specialized assistance several times a week while others are in segregated special education classes the entire year. Therefore, costs in these areas were expressed as weights per enrollee.

It was initially concluded that full-time equivalencies could be established for vocational programs because most programs conform to minimum time periods prescribed by the State. For

example, a vocational agriculture student in one district is likely to spend the same amount of time in a particular agriculture course as is his counterpart in another district. Although data for vocational programs were gathered on the basis of full-time equivalencies, these cost differentials were converted later to costs per enrollee because of similar difficulties in establishing full-time equivalencies.

In collecting the necessary data on students, staff, salaries, and other expenditures, the cost data form designed by Dr. William McLure, co-author of the special NEFP study, Early Childhood and Basic Elementary and Secondary Education, was used. This form was similar to the one used in his special study for NEFP with changes made to reflect the scope of the program to be costed in Texas and the categorical breakouts of Texas data to be used. The cost form and the instructions for completing it which were used by staffs in the seven districts and by Agency staff members are Appendix C of this paper.

All data was collected for the base year of 1970-71, the most recent year for which the necessary data was available. Data was gathered in four major areas to reflect the current expenditures of each district in 1970-71. Both capital outlay and debt service expenditures were excluded because these are not usually considered to be current expenditures and because it was expected that these areas would remain entirely dependent on local funds. In addition, funds expended for transportation and food services were excluded except in cases where they could be attributed to

special program areas such as special education.[13] The four major areas and the sources for the data acquired in each are given below.

Section I: Students.[14] When completed, Section I of each district's cost data form contained information about the numbers of students who participated in programs in each of the designated program areas during 1970-71. All student enrollment figures were expressed in Average Daily Membership. Line 3.0 gives each district's total ADM and ADM by grade level. Lines 6.0 and 8.0 (and their subparts) show ADM for each program area of special and compensatory/remedial, education respectively by grade level. Full head counts, converted to ADM where necessary, were reported in these lines. Vocational education enrollments were reported on line9.0 and its subparts using full-time equivalencies were calculated on the basis of the number of credits received. For example, if it was reported that agriculture courses with each enrollee receiving 4 of his 10 credits for the year in the course, then 40 FTE was shown on line 9.1 and the other 60 FTE on line 10.0. Line 10.0, the ADM by grade level of students participating in the basic/regular education program was computed by subtracting the sum of lines 6.0, 8.0, and 9.0 from the gross ADM given in line 3.0.

13./Although transportation and food services were both included in the NEFP study, it was decided that the Texas study would be restricted to educational program costs with lump sums per district to be added on for non-education programs.

14/See Appendix C.

Section II: Staff. Section II yielded information on the total numbers of professional staff in each district as well as the number of staff involved in providing programs in each particular area of the study. Section II information for elementary, middle, and high school staff members was provided on a separate form for each of these three levels. Staff members who were classified as instructional personnel included all regular, special and itinerant teachers. Non-teaching supportive staff included administrative and supervisory personnel; counselors; psychologists, social workers and visiting (homebound) teachers; librarians; teacher aides; and an "all other" category which included professional personnel such as nurses who did not fit in one of the other specified categories. All personnel, instructional and supportive, assigned to one of the identified program areas were shown on lines 6.1, 6.2, or 6.3 for special education programs, 8.1, 8.2, or 8.3 for compensatory/remedial programs, and lines 9.1-9.7 for vocational programs. In addition, regular teachers were assigned to the special education and remedial/compensatory program areas based on the pupil-teacher ratios of that district. For example, if there were 150 students in ADM reported on line 8.1 of Section I as participating in elementary compensatory/ remedial programs in a district with an elementary pupil-teacher ratio of 25:1, 6 regular teachers were also shown on line 8.1 of Section II in addition to the special teachers and supportive staff already shown there. Similar prorations of regular supportive staff shown in line 3.0 were made based on the

number of regular teachers in each program. It was not necessary to prorate either regular teachers or supportive staff to the various vocational programs because full-time equivalencies were used for vocational students in Section I. Line 10.0, teachers and supportive professional staff assigned to the regular program, was calculated by subtracting the sum of lines 8.1-9.7 for each staff category given from the number given for each category in line 3.0.

Section III: Salaries. Section III contained the salaries for all staff shown in Section II by grade level and program area. In each case, the district's average salary for each personnel category was used as the base salary and multiplied by the number of staff members done in Section II.

Section IV: Other Current Expenditures. All other expenditure data for each district were shown in Section IV. Total expenditures which were shown in line 3.0 were categorized according to the established statewide accounting system in use in Texas during 1970-71. These categories were:

Administration, General Control and Security

Instructional Supplies, Clerical, Other

Operation and Maintenance of Plant

Transportation

Food Services

Other Auxiliary Services, Including Health

Any Fixed Charges, Including Social Security and Retirement

Community Services

Salries for staff such as central office personnel, which were not reported in Sections II and III because they were unassignable to grade level or program area, were included in this section. Those expenditures which were direct allocations for specific programs such as funds for special equipment and instructional materials for special education programs were shown as such. However, most expenditures were not assignable either by grade level or by program area; these had to be prorated across grade levels and program areas according to the number of staff reported in Section II. All expenditure categories except transportation and food services were prorated; only expenditures in these two areas which could be directly attributed to a specific program were reported in Section IV and, therefore, used in determining the weights.

All data for the twenty-four districts whose forms were completed by Agency auditors under the supervision of a study coordinator were obtained from existing State collections with the exception of the pupil, staff and cost information for those districts with programs for non-English speaking students. Information for this program area was obtained from the 1970-71 ESEA Title VII applications for funds for bilingual education programs.[15]

Once the information needed to compute the cost differentials

15/ U.S. Office of Education Form 4491-4.

each program area included in the Texas study was obtained and reported on the cost data forms, the forms were sent to Dr. McLure who was under contract with the Agency to calculate a set of Texas weights. Before the per pupil costs could be calculated for each program area and the cost indices established, many of the forms had to be recalculated to obtain a higher level of consistency of data treatment procedures between forms. The area in which the most recalculations were made was vocational educational enrollments. Due to a misunderstanding in the procedures to be followed in calculating full-time equivalencies for vocational students, two different kinds of calculations were originally made which in Dr. McLure's estimation would significantly affect the differentials to be calculated. All full-time equivalencies were recalculated based on the percentages that the various vocational programs were of the total annual credit load of an average student.

Three of the 31 good practice districts were dropped at this stage of the study because of data errors, inconsistencies and ommissions in their cost data forms which could not be corrected easily. Using the forms for the 28 good practice districts remaining in the study, per pupil (ADM) costs were calculated for each districts programs. A set of weights was then calculated for each district using the base unit of 1.0 to reflect the per pupil cost of the regular elementary program.

Once a set of weights had been established for each district, Texas weights were computed by averaging the district weights

in each area. For example, the twenty-eight weights for the regular high school program were summed and divided by 28 to yield an average weight of 1.28 for a regular high school student. In some of the special program areas, most notably early childhood special education and programs for non-English speaking students, the resulting weights were based on an average of less than 28 because not all of the good practice districts had programs in those areas.[16]

Listed below are the Texas weights which were then used in analyzing a funds allocation plan based on meeting the varying per pupil costs of providing the programs included in the scope of the study.

TABLE III : TEXAS PER PUPIL WEIGHTS FOR THE INSTRUCTIONAL PROGRAM

BASIC PROGRAM:	
Early Childhood Special Education	1.26
Kindergarten	1.05
Elementary	1.00
Middle School	1.12
High School	1.28

SPECIAL PROGRAMS:	Elementary School	Middle School	High School
Speech Handicapped	1.36	1.52	1.57
All Other Handicapped	2.21	2.30	2.71
Low Income	1.37	1.38	1.51
Non-English Speaking	1.77	1.67	1.67
Migrant	1.47	1.51	1.81
Agriculture	----	1.37	1.56
Homemaking	----	1.21	1.38
Trades and Industry	----	1.29	1.47
Office, D.E. and Health	----	1.24	1.42
Cooperative	----	1.23	1.41
Handicapped Vocational	----	2.31	2.64
Coordinated Vocational-Academic Education	----	1.59	1.82

16/ A more detailed explanation of Dr. McLure's procedures for determining each district's weights is in Appendix D.

The dollar value for each of the weights was based on the average value for 1.0 found in the 28 good practice districts. Summing each district's value for 1.0 and dividing the total by 28 yielded an average value of $497 for 1.0, the weight for a regular elementary school student. This dollar average was then multiplied by each of the weights in order to express them as dollars. In Table IV is displayed the per pupil costs established for each of the program areas included in the study.

TABLE IV : PER PUPIL COSTS FOR TEXAS PROGRAMS

BASIC PROGRAM:	
Early Childhood Special Education	$626
Kindergarten	522
Elementary	497
Middle School	557
High School	636

SPECIAL PROGRAMS:	Elementary School	Middle School	High School
Speech Handicapped	$ 676	$ 756	$ 780
All Other Handicapped	1098	1143	1347
Low Income	681	686	750
Non-English Speaking	888	830	830
Migrant	731	751	972
Agriculture		681	775
Homemaking		602	686
Trades and Industry		641	730
Office, D.E. and Health		617	706
Cooperatives		612	701
Handicapped Vocational		1148	1312
Coordinated Vocational-Academic Education		791	904

Phase IV: Securing School District Data for Analyzing the Weighted Pupil Approach

In order to analyze the impact of a distribution plan based on weighted pupils in Texas, data other than the set of Texas weights were needed. Decisions regarding the data bank to be built were based on the kinds of analyses to be performed. Basically, analyses were projected for three general areas--total instructional program entitlements, district-by-district actual expenditures in 1970-71, and total individual program area entitlements. In addition, it was envisioned that estimates should be made of total program entitlements and corresponding district distributions and comparisons with actual expenditures of the effect of a weighted pupil distribution formula based not only on students actually served by the various programs in 1970-71 but also on those identified as needing programs. In order to do these analyses, student population data including those actually participating in programs as well as those needing them were gathered by grade level and program area for each district in Texas. Additional district level information on expenditures was also obtained for the comparative analyses which were envisioned.

A total of 177 data elements were obtained and loaded into the computer for each of Texas' 1149 school districts. All but ten of these data items for each district represented various outbreaks of pupil populations. Several data sources were used in building the data bank for each district. The problems of data

comparability experienced in gathering data for determining cost differentials were also encountered during this phase of the study. Attempts were made to use the same sources regarding the numbers of students participating in various programs as were used earlier in determining the weights. The form in which the data elements existed also varied with report-- some were in head count, others in ADA, and others in initial enrollment. Each data source was loaded into the computer in its existing form and, where necessary, programs were written to convert it to ADM, the base unit of analysis in the study as well as to sum to the subtotals needed for the analyses. This was done in order to avoid any human errors in making the conversions before loading the data. However, if the conversions had been made earlier and the grade level information had been summed into elementary, middle, and high school subtotals for each program area, the number of data elements loaded and stored in the data bank for each district could have been substantially reduced. Appendix E contains a list of the individual data elements loaded for each district.

With the exception of data for students participating in programs for non-English speaking students which were obtained from applications submitted to the U.S. Office of Education for ESEA Title VII funds (OE Form 4491-4), all population data came from State collections. The major sources of data were the Superintendent's Annual Report, the Superintendent's Special Education Statistical Report, the Consolidated Application for State and Federal Assistance, and the Professional Personnel Assignment Form.

Individual sources of student population data for each program area and the adjustments make by computer program to obtain comparable data are given in Table V, pages 37-41.

Financial data obtained for each district included the following:

Actual Total Foundation School Program Cost

Actual Expenditures for Instruction,

Total District Expenditures (excluding capital outlay and debt service)

Transportation Allotment Received from the State

State Contribution to the Cost of the Foundation School Program

Direct Federal Revenue

Other Federal Revenue

Total Revenues of District Excluding Bond Sales for Capital Outlay

Total Expenditures including Capital Outlay and Debt Service

Expenditures for Adult Education Programs

All expenditure information was collected for the base year of the study, 1970-71. The sources for these data items were the Final Application for Foundation Funds and the audit report filed by each district.

Projecting the number of students in need of special programs covered in the study was based on both existing data documenting need and on incidence rates. Incidence rates, reflecting the percentage of the student population in need of programs, were determined for program areas in which no information existed regarding unmet needs. Program managers for both special education

TABLE V:

TABLE V: SOURCES FOR ACTUAL ENROLLMENT DATA FOR 1970-71 BY DISTRICTS

Program Areas in Which Target Population Data Needed	Source for District Level Information	Computations Made
Regular Kindergarten Elementary Middle High	Superintendent's Annual Report (SAR) Part I. Enrollment, ADA and ADM as reported.	Ungraded students counted as elementary. Special Education students, except for Speech and Hearing Students, counted as Grade 13 prorated among grade levels according to enrollment found on Special Education Statistical Report.
Special Education Speech and Hearing; All other	Superintendent's Special Education Statistical Report	Data summed into grade levels using following conventions: Pre-Elementary 1 - 6 + ungraded elementary 7 - 9 10 - 12 + ungraded secondary ADA and ADM obtained by using SAR percentages for each district.
Low Income	Consolidated Application for State and Federal Assistance (CASFA)	Used actual participant data shown in Column 7 of FP 71-004. Converted to ADA and ADM using SAR percentages for each district.

SOURCES FOR ACTUAL ENROLLMENT DATA FOR 1970-71 BY DISTRICTS
(continued)

Program Areas in Which Target Population Data Needed	Source for District Level Information	Computations Made
Non-English Speaking	ESEA Title VII Application	Population data gathered only for Title VII participants. Although it is recognized that other districts have bilingual programs supported by local funds, no data collected by the Agency provides an accurate reflection of participants.
Migrant Education	Consolidated Application for State and Federal Assistance (CASFA)	Grade level counts on Form 6 summed to Kindergarten; 1 - 6 + ungraded elementary; 7 - 9 + ungraded secondary; and grades 10 - 12. Pre-kindergarten and ungraded special education not used. Converted to ADA and ADM using SAR percentages for each district.
Vocational Education	Professional Personnel Assignments (PPA)	Enrollments for each district were gathered by the PPA Area Assignment code and summed up by program cluster. Enrollments were then converted to ADA and ADM using ratios found in each district's SAR. The codes which were summed for each cluster are:

SOURCES FOR ACTUAL ENROLLMENT DATA FOR 1970-71 BY DISTRICTS
(continued)

Program Areas in Which Target Population Data Needed	Source for District Level Information	Computations Made
Cooperative		01.02 04.01 04.04 07.01 07.02 09.02 14.02
Coordinated Vocational Academic Education (CVAE)		18.01 18.99
Agriculture		01.01 01.03 01.04 01.06 01.07 01.99
Homemaking		09.01 09.04

SOURCES FOR ACTUAL ENROLLMENT DATA FOR 1970-71 BY DISTRICTS
(continued)

Program Areas in Which Target Population Data Needed	Source for District Level Information	Computations Made
Trades and Industry		16.01
		16.99
		17.01
		17.02
		17.03
		17.04
		17.07
		17.08
		17.09
		17.10
		17.12
		17.13
		17.14
		17.15
		17.16
		17.19
		17.23
		17.26
		17.27
		17.29
		17.31
		17.32
		17.33
		17.34
		17.35
		17.36
		17.37
		17.99

SOURCES FOR ACTUAL ENROLLMENT DATA FOR 1970-71 BY DISTRICTS
(continued)

Program Areas in Which Target Population Data Needed	Source for District Level Information	Computations Made
Office, Distributive and Health Education		04.03 04.99 07.99 14.01 14.99
Handicapped		No programs operating in 1970-71.

and vocational education were asked to provide estimates of the percentages of the total student population who were in need of programs in each of their respective areas. The percentages provided by the Department of Special Education were based on ones published in 1970 by the U.S. Office of Education's Bureau of Education for the Handicapped. The Bureau's estimates, which were summed to reflect the program areas covered in the study, yielded an incidence rate for Speech Handicapped of four percent and for all other handicapping conditions of 12.19 percent. In making analyses based on meeting the needs of handicapped students, these incidence rates were applied to each district's elementary, middle, and high school ADM.

Estimates of anticipated enrollments in vocational programs for 1976-77 were found in the Texas State Plan for Vocational Education, Fiscal Year 1973. These projected enrollments were converted to incidence rates by determining the percentage that each was of the projected secondary enrollment for 1976-77. The incidence rates which were then applied to each district's high school ADM were:

TABLE VI: VOCATIONAL EDUCATION INCIDENCE RATES

Program Area	Incidence Rate
Cooperative	12.4%
Handicapped	.16
Coordinated Vocational Academic Education	12.01
Agriculture	2.95
Homemaking	27.40
Trades and Industry	8.30
Office, Distributive, and Health Education	8.30

These incidence rates were used to project the costs of serving students in need of special and vocational education programs. In making analyses, if the number of students in need of specific programs was less using incidence rates than the actual participation figures, then the actual data were used.

The source of information about the extent of need for special programs for low income, non-English speaking and migrant students was the 1970-71 Consolidated Application for State and Federal Assistance (CASFA). Each district which filed a CASFA for ESEA Tilte I, Title I Migrant, Title II or NDEA Title III funds, was asked to estimate, by grade level, the number of its students with the following characteristics: low income, migrant, non-standard English. No criteria are given for identifying students with these characteristics which results in a great range of needs reported. Since incidence rates would have been difficult to determine in these areas and would probably have been no less of a gross measurement of need than the district estimates, the CASFA estimates were used. The estimated counts submitted by each district were summed to grade level and converted to ADM using the enrollment to ADM ratio of each district. Again in districts where the estimated need was less than the reported number of students served by a program in one of these areas in 1970-1971, actual participation data was used.

Phase V: Analysis of the Weighted Pupil Approach

Analyses of any method of allocating funds to school districts can be approached in several ways. Analyses can be limited to

projecting the costs of the distribution method and its impact on individual districts or expanded to encompass plans for the acquisition of revenues to support the proposed distribution system including alternative methods of taxation. Analyses in the Texas weighted pupil study were designed primarily to assess the impact of a weighted pupil allocation plan on Texas school districts. This was done for two major reasons. First, it was felt that tying a weighted pupil distribution plan to one or more revenue-raising plans would diffuse the focus of the study since several different revenue plans could be used to support such a plan. Second, this limited approach parallelled plans of the Board Committee to examine distribution plans before considering alternative revenue plans.

All analyses were done by computer using a program developed by a computer analyst in the Agency's Management Information Center who was assigned full-time to the study. Prior to the decision to develop a new computer system for the Texas study, the computer system designed by members of the NEFP staff was evaluated for possible use. The major reasons that the NEFP system was not installed on the Texas computers involved the language of the NEFP system, its printout format, the amount of data which it was designed to hold, and the changes which would have had to be made in the computer statements to accomodate the Texas study. The language used in the NEFP system--PL/1-- was unfamiliar to Agency staff members who did most of their work using Cobol. Utilization of the NEFP system would have necessitated engaging a new staff member

familiar with the PL/1 language or providing intensive training for an existing staff member. Second, the system was designed to produce printouts in the size of a regular sheet of paper. This substantially reduced the number of characters and hence the number of columns which could be printed across the page for any single analysis. Third, the NEFP system was designed to accomodate data for only 800 districts necessitating changes to increase the storage space to accomodate all of Texas' 1149 school districts. And finally, since the Texas study dealt with program areas and populations which differed from the NEFP study, a substantial number of the computer statements would have had to be rewritten to accomodate these changes and the Texas weights. Althcugh, it would have been possible to make each of these changes necessary to making the NEFP system usable in Texas, estimates of the time required to make them and test the system were not much less than the estimates of the time it would take to design, test and operationalize a new system.

An extensive list of possible analyses of the effect of a weighted pupil distribution formula on Texas districts was developed while the new computer system was being designed and the data elements for each district loaded. However, once the system was operational, the shortness of time in which to complete any analyses prior to the Board Committee's consideration of the study findings necessitated that only selected analyses be done initially. The criteria used in selecting those analyses to be made included those which would further the stated objectives of the study and those

which would display the significant differences in using a weighted student approach as the basis for the distribution of funds as compared to other allocation methods.

Of primary interest were projections of costs of funding an educational program based on weighting students according to the costs of meeting their different needs. Analyses of the costs of the proposed Texas program were prepared showing the funds that each district would receive and the resulting total State cost of using weighted students. Although the average cost for 1.0--$497-- found in the twenty-eight good practice districts was used in making most of the analyses, the earlier analyses included projections of instructional program costs at different values for 1.0 ranging from $413 to $601.

District analyses were done by using two different sets of student population data. The first, designated as "students served", included the average daily membership (ADM) of the populations actually served by special programs in each district in 1970-71, the base year of study data and analyses. The second set of population data, "students identified", included the estimates of existing need for different programs in each district.

In the earlier analyses, all weights were applied as originally calculated.[17] Weights in each of the special education and compensatory program areas represented the total per pupil cost for the school year. These special program areas weights were multiplied

17/ Refer to page 9 of this paper for these weights.

by the number of students enrolled in each special program area and the regular program weights were multiplied by the total ADM less the ADM for each of the special program areas with the exception of vocational education. (This was not necessary for vocational education because of the use of FTE's.) Where students were served by more than one of the special programs--which is often the case--, they were counted twice using this method. In many districts, this resulted in negative ADM and dollar totals for the regular program when these duplicate students were subtracted from the total ADM for each of the program areas in which they were served. Although the analyses and resulting total district and State cost projections were not changed by these negative figures, individual program area costs at both the State and district levels could not be displayed in an understandable form because of the negative figures which appeared for one or more of the regular programs.

At this point in the study, it was decided to express the weights for special program areas and vocational education as add-on weights which when expressed as dollars would represent the additional per pupil cost beyond the regular program cost of the special programs only. In order to do this, all or the per enrollee special education and remedial/compensatory weights were recalculated as add-on weights by subtracting the regular program weight from the per enrollee special program weights. For example, the high school special education per enrollee weight which had been determined during an earlier phase of the study was 2.71. The add-on weight expressing

the relative cost of special education for each high school student was calculated by subtracting 1.28, the regular high school per pupil weight, from 2.71 which yielded an add-on weight of 1.43. Because the vocational education weights were originally calculated as per FTE weights, they were first recalculated as per enrollee weights and then expressed as add-on weights using the same procedure as outlined above.

The set of weights for the regular programs--kindergarten, elementary, middle and high school-- remained the same. The weight for Early Childhood Special Education programs also remained the same because it was applied to a special population of students not used in the rest of the study--3 and 4 year olds. When expressed as add-ons, the special program weights used subsequently in the analyses were:

TABLE VII: ADD-ON WEIGHTS FOR STUDENTS IN SPECIAL AND VOCATIONAL PROGRAMS

Program Area	Elementary School	Middle School	High School
Speech Handicapped	.36	.40	.29
All Other Handicapped	1.21	1.18	1.43
Low Income	.37	.26	.23
Non-English Speaking	.77	.55	.39
Migrant	.47	.39	.53
Agriculture		.25	.28
Homemaking		.09	.10
Trades and Industry		.17	.19
Office, Distributive Education and Health		.12	.14
Cooperative		.11	.13
Handicapped Vocational		1.19	1.36
Coordinated Vocational Academic Education		.47	.54

Once the add-on weights were determined, they were used in all subsequent analyses to express the relative cost of providing special programs. All students in a district were first counted as regular students at the appropriate grade level, kindergarten, elementary, middle or high. When the weighted ADM for the regular programs was converted to dollars using 1.0 equal to $497, the total dollar allocation which each district would receive for the operation of its regular program resulted. Each district's allocation for special programs was then calculated by multiplying the ADM for each of the special program areas by the add-on weight for each area and then multiplying the weighted ADM by $497. By using add-on weights in this manner, negative totals for the regular students and program costs were avoided because the sum of ADM in special programs was no longer subtracted from the total ADM.

In order to analyze the effect of the projected costs of a weighted student allocation plan on both the State and individual districts, the cost estimates were compared to actual expenditure data for 1970-71. Although the results of the comparisons showed that it would cost less than one percent more to provide programs for students served similar to the level of quality represented by the 28 good practice districts than actual expenditures in 1970-71, a significant redistribution of funds would be required with approximately half of Texas' districts receiving increased amounts of funds and the other half receiving reduced amounts. This was displayed in district level comparisons. In addition, the number of

winners and losers and the range of losses and gains were also given in conjunction with each comparison of the weighted student allocation projections with other allocation plans.

In addition to actual expenditures in 1970-71, the weighted pupil distribution formula was also compared on a district-by-district basis with a flat grant distribution plan in an effort to determine what effect providing varying amounts of funds per student would have on individual districts as compared to equal funds per student.

Tables X-XIV of the written report of the study display the results of the analyses discussed above and of the format used for each analysis. The remainder of the analyses done for the deliberations of the Board Committee included the addition of funds for transportation, food services, capital outlay and debt service interest. Actual expenditures in each of these areas for 1970-71 were added to the projected costs of the weighted pupil allocation formula in order to provide a more comprehensive estimate of the total cost of the proposed distribution plan.

In previous comparisons to actual expenditures in 1970-71, all sources of revenue-- Federal, State, and local-- received by each district in 1970-71 were included. In order to reflect the additional funds which would be required for the State to support a weighted student allocation plan in each district, the funds received from local enrichment and Federal sources were subtracted from the grand totals for each district. The results of this yielded both the absolute amounts and the percent increase needed in State revenues

above the level of State funds expended in 1970-71. It was found that a 40.4 percent increase in State expenditures would be needed for the State to fund fully the weighted pupil allocation plan at the level of quality found in the 28 good practice districts. Tables XV-XX show both the formats used in these analyses and results which were obtained.

The results of all analyses were displayed in tabular form with the districts listed in the first column and variables used in each analysis displayed in the rest of the columns. The tables were designed in all cases for ease of reading and to present the most important findings of the analyses. Two types of printouts were designed for each analysis, one giving district information for each of Texas' 1149 districts and the other displaying the same information for ten districts with State totals for all districts. The ten districts which were chosen for summary display purposes represented a range of financial conditions, were of different sizes and were located in different parts of the State.

Phase VI: Preparation of Administrative Guidelines to Accompany A Weighted Student Distribution Plan

During the initial planning of the Texas weighted pupil study, it was envisioned that broad guidelines would be developed to suggest how such a distribution method might be administered. Areas suggested for inclusion in the guidelines were state salary schedules, district accountability for expenditures, rules governing expenditure of funds in different program areas, reporting requirements, and local control.

From the outset, it was recognized by the study coordinators that two different kinds of guidelines could be written: one would give districts wide discretion in determining how the funds which they were allocated would be expended and the other would require districts to spend the weighted amount it received per child specifically for that child. The guidelines, which were conceptualized by the study staff would have outlined procedures for the distribution of funds to districts based on their identification of student needs and the development and implementation of programs or special services designed to meet those needs as reported in a district plan submitted to the Agency, probably at two year intervals. The automatic financing mechanism of the existing Foundation School Program would be maintained so that districts could plan based on realistic estimates of the funds they would receive each year. In addition, it was intended that local control over the determination of programs and funds expenditures be continued by giving districts some flexibility in determining allocation of funds for the regular and special program areas. This flexibility might be defined as the option to allocate a certain percent of the funds received for one program area to another as long as all students who were reported as being served were actually served by each of the program areas.

Because of the sensitiveness of several of the areas to be covered in the guidelines and the time that it would take to resolve satisfactorily the issues within each of these areas, it soon became apparent that developing a set of guidelines that would govern

the administration of a weighted pupil distribution plan was too extensive a task and beyond the capacity of the staff given the time available for completion of the study. Hence, in reporting the weighted pupil study procedures and findings to the Board Committee, the study coordinators suggested that, if the weighted pupil approach to funds distribution were pursued further as a means of financing Texas public education, extensive consideration be given to the various alternatives available for the administration of the plan.

Phase VII: Preparation of Study Report and Presentation to the Board Committee

A full report detailing all phases of the study was written primarily for the Board Committee and other groups studying alternative distribution plans for Texas. In addition, the written report was viewed as a means of providing documentation of the procedures which were used in case parts of the study were ever repeated. Particular effort was given to providing written documentation of the selection and costing of programs as found in the good practice districts since the study represented one of the few attempts in Texas school financing history to determine the costs associated with providing quality programs.

In addition to the report which detailed the methodology, procedures and analyses undertaken during the study, a summary report was prepared. The summary was designed to provide an overview of the major findings of the study including the projected costs of a weighted pupil allocation plan using both students served

and students identified as needing special programs as well as to outline the procedures used in determining the Texas weights. The summaries of the three distribution plans prepared by the Agency staff for consideration by the Board Committee were distributed to all Texas superintendents to keep them abreast of the Committee's deliberations and to obtain their input.

The oral presentation of the Texas weighted pupil study which was prepared for the Board Committee also dealt with the major findings of the study with a summary of how the weights were determined and applied to Texas districts in the analyses which were made. During the oral presentation, the impact of the weighted pupil approach on Texas districts was displayed by using statewide totals as well as the individual results for the ten districts which were chosen as representative of the wide range of conditions found in Texas school districts. The entire set of printouts for all districts were also made available to each Committee member.

Cost of the Study

The entire cost of the study was approximately $20,000. Except for $3000 in computer costs, the majority of the expenditures were for manpower. Since Agency staff members were used as staff to the study, most of the manpower costs were absorbed by the Agency without any additional expenditure of funds. Estimates of the costs for the major phases of the study were as follows:

Phases I and II: Scope of the Program and Selection of Good Practice Districts	$2000.	
Phase III: Determination of Texas Weights	$5000.	
Phases IV and V: Gathering of School Population Data and Analyses	$8000.	(this includes $3000 in computer costs)
Phase VII: Preparation of Written Report	$1500.	
General Administration	$3500.	

EVALUATION OF THE TEXAS APPROACH

The Texas cost differentials and the analyses performed in applying them as a method for distributing funds represent reasonable estimates of the costs of supporting educational programs for all districts at the average expenditure level found in the twenty-eight good practice districts. However, both time constraints and data problems lessen the degree of confidence that can be placed in the weights for actual funding purposes. In addition, slight changes in several of the procedures might have yielded significantly different weights. The major problems which were encountered and other procedures which might have been followed are discussed below in evaluating the Texas approach.

The basis of a weighted pupil approach is the selection of districts to be used in establishing pupil weights and a dollar value for 1.0. The selection of Texas' good practice districts was based solely on judgments of quality programs. A concern shared by staff members during the development of selection procedures was the nonavailability of other variables which could be used to determine which districts offer quality programs. Specifically, evidence of quality in terms of the products of the educational system was sought. One source which was evaluated for ascertaining the quality of students produced by district educational systems was achievement test scores. Although recognizing that achievement test scores are not often a valid measure of student achievement, the staff hoped to use test results

as one way of securing nominations of best practices in addition to the judgements of those selected to make nominations. Despite the fact that Texas has not had a State testing program involving all districts during recent years, the possibility of using test results reported by districts on program evaluations was explored. However, after examining these reports, it was concluded that no comparable test data existed which could be used because of the wide number of achievement tests used by Texas districts and the variances in the grade levels at which the tests were administered.

Changes in the nomination process itself might also have yielded different results. The inclusion of three areas -- adult vocational, adult basic, and gifted/talented -- in the nomination criteria which were excluded later from the study may have resulted in some districts not being nominated who had best practices in all areas but these three. In addition, a different list of best practice districts might have been obtained if a weighting system had been developed which would have assigned higher values to nominations in certain areas than to those in others. In the procedures used, a nomination for best practice in early childhood special education counted as much as a nomination for best practice in a regular elementary education program. The possibilites of weighting the nominations were not explored extensively in the Texas study because determining the values would have involved another set of judgements which would have made the nomination and selection process more complex to

to manage and explain.

The major problem confronted in the study concerned sources of data. The data problems were particularly acute during the acquisition of pupil, staff, salaries, and other cost information to be used in establishing the Texas weights. As in most states, the Texas data system is organized around the existing State aid system. Data for areas covered in the weighted pupil study which were not part of the existing Foundation School Program were either nonexistent or had less validity than data which were used in 1970-71 for distributing State funds. Two areas, adult basic education and programs for the gifted and talented, had to be excluded from the study because of the lack of pupil cost, and staff data. In program areas which have been supported traditionally with Federal funds, such as low income and non-English speaking, the weights which were determined represent for the most part the per pupil expenditures in the 28 districts from Federal funds only because districts are not requested usually to provide information to the State on local expenditures, if any, for these programs.

Even in some areas which have been supported in part with State funds, several, often conflicting, sources of data were available. For example, staff information was found on two major reports filed by all districts in 1970-71. One report which identified staff members by teaching category was used for the distribution of State Foundation School Program funds to each district. Since personnel who were reported as teachers did not have to perform actual teaching duties, many districts, in order to qualify

for more State funds, reported certificated central staff members with greater experience and/or degrees as teachers in place of personnel actually teaching who had less experience and/or fewer degrees. Using this report for Section II would have resulted in staff counts which did not represent the actual practices of the districts in staffing the various program areas. Another report of personnel filed by each district was designed to collect management information on personnel, their responsibilities and the number of students which they serve. In this report for 1970-71, each district reported all of its professional personnel and coded their responsibilities. Although this report was used only for information, the staff counts by program areas were considered by Agency personnel to be a better reflection of actual district practices than the counts reported for funding purposes and consequently were used in the study. In other cases of duplicate sources of information, attempts were made to use the sources which staff members felt would provide the most accurate information about the actual practices of the twenty-one districts.

It was envisioned that some of these data problems would not occur in the seven districts for which data forms were completed by staff members from each district using existing district data for 1970-71. Although no extensive survey was made of the individual problems of the seven districts in securing data for completing the cost form, informal reports from staff members in some of these districts provided insight into the information existing at the district level. According to them, data systems in their respective districts in 1970-71 were also organized around the existing State support system, the Foundation School Program, in order to facilitate reporting information to the State for funds distribution.

furthermore, if detailed records were not required by the State, then detailed information did not exist often at the district level. Because of this, many of the problems experienced during the acquisition of the data for the twenty-one good practice districts also occurred in several of the seven districts. Since 1970-71, many of these districts have implemented program budgeting systems, which would have enabled them to provide more detailed data about individual programs if a later base year were used.

Calculating the set of Texas weights in a different way also would have yielded a different set of weights. Instead of computing a set of weights for each of the twenty-eight good practice districts and then averaging the weights to establish a weight for Texas, the weights could also have been computed by totaling all of the costs associated with a program for all twenty-eight districts and dividing that sum by the sum of the students participating in that program in the twenty-eight districts. This method of calculating the weights was not used for several reasons; most important among these was the following. The use of the alternative calculation method described above would have resulted in weights which were largely determined by the practices of the largest districts in the study, thereby obviating the need for gathering data from the smaller good practice districts. However, different size districts were included in the list of good practice districts for the express purpose of including any costs which resulted from differences in their size, differences in the cost of living, remoteness, geographic location, or other variables in the determination

of the Texas weights. Furthermore, it was tendered that weights determined by a small number of large, urban districts in Texas would have been untenable politically in a State which has 1149 districts, the majority of which consider themselves to be located in nonurban areas and which have less than 1000 students.

Most of the Texas weights were based on data from the majority of the twenty-eight good practice districts and can, therefore, be considered as representative of the average actual costs, based on existing information, of providing quality programs. The number of districts on which the weights in each program area were based is given below.

TABLE VIII: NUMBER OF DISTRICT WEIGHTS USED IN DETERMINING TEXAS WEIGHTS, BY PROGRAM AREA

Program Area	Number of District Weights		
Kindergarten	26		
Elementary	28		
Middle School	28		
High School	28		
Early Childhood Special Education	16		
	Elem.	Mid.	High
Speech Handicapped	27	21	16
All Other Special Education	27	5	5
Low Income	28	20	7
Non-English Speaking	6	2	1
Migrant	7	5	2
Agriculture			25
Homemaking			28
Trades and Industry			28
Office, Distributive Education and Health Education			19
Cooperatives			27
Vocational Handicapped			1
Coordinated Vocational Academic Education			20

However, as can be seen from examining the table above, weights in some areas were only based on the practices of a few districts. This was true particularly in some special program areas, such as migrant, non-English speaking, and handicapped vocational, because of the lack of widespread programs in these areas. In addition, weights for middle school vocational education programs were not based on actual practices because of the lack of information about the programs. These weights were computed by taking the average high school weight for each vocational area and multiplying it by $\frac{1.12}{1.28}$, the ratio of the regular middle school program weight to the regular high school program weight. As a result of the lack of information for special and middle school vocational progams, any funding done on the basis of these weights would need to be accompanied by some provision for adjustments if districts found themselves unable to provide programs in these areas because of the low level of funds allocated to them for the programs. These adjustments could be calculated on a hold-harmless basis guaranteeing each district the level of funds expended per child in each of these areas in 1970-71 until weights based on a larger number of good practice programs and more detailed information could be established.

The lack of widespread practices in some of the special programs and the lack of discrete information in other areas raises questions about the range of weights which should be included in the scope of a weighted pupil study. Based on the Texas experience, one could contend that the level of detail of the program typology should be

no greater than the level of detail of the data which would be used in determining per pupil program costs and hence weights. For example, if the Texas study were repeated using existing data, weights should probably be determined for middle and secondary vocational programs alike, and only one weight, rather than three at different grade levels, should be established for each special program area in which little information exists by grade level.

As stated earlier, the major constraints in the Texas study were the lack of time and data. If the study were repeated, procedural changes could be made which would have alleviated many of the problems which were encountered due to these constraints. A similar study probably should not be conducted in a timeframe of less than six months, and up to a year should be allotted if a major data gathering phase is necessary. Adequate time should be spent during the planning phase in determining what data are needed, their availability in the form needed, and their validity. In addition, pilot tests using the cost data forms should be used to determine the data problems that are likely to occur later so that they can be resolved before beginning the actual data gathering phase. Finally, an evaluation of the available data should be made in terms of their limitations for use in the study. If data are not available at the state level, then the possibility and cost-benefits of securing the necessary data from districts should be explored.

Although a longer period of time in which to plan and complete the Texas study would have enabled the staff to resolve fully some

of the data problems which surfaced during the study, the weights would probably not have been significantly different, than those which were established, if the existing data base were used since all data calculations and computations were done similarly for all districts. Significant changes in the Texas weights would have resulted, however, if data were collected specifically for the study from a future base year rather than one in the past. If sufficient time existed,- at least eighteen months-- all data used in the study could be gathered expressly for the study by using an upcoming school year. This could be done by selecting the good practice districts during the spring and then training the districts' fiscal staffs during the summer to report the current expenditures for the school year beginning the following September as they occurred. Several benefits would result from gathering the data in this way. Prior knowledge about the specific kinds of data needed would enable these staffs to collect the data in a usable form and at the level of detail needed. The weights which would be calculated from data gathered in this manner would provide a reasonably accurate reflection of actual costs because records could be organized by program area and grade and expenditures and other information specified accordingly. This would substantially reduce the amount of expenditures and personnel which would have to be prorated across all program areas in determining cost differentials, a procedure which can distort the real differences between per pupil program area costs.

A longer period of time in which to accomplish the study would also permit the acquisition and training of a permanent staff assigned full time to the study. In total, more than thirty Agency staff members contributed to the Texas weighted pupil study. Most of these were involved in the acquisition of data for establishing the cost differentials and of population data for analyzing the impact of a weighted student approach on Texas districts. By having a full time staff specifically assigned to the study, the number of people working with the data could be substantially reduced, which should result in a greater degree of accuracy in the data. A permanent staff sufficient to complete the study itself would also have the capacity to compute the cost differentials without having to contract with an external consultant. A computer program could be written for calculating the cost differentials if data from a large number of districts were used.

Another option for states which wish to explore a funds distribution alternative based on weighted students would be to use the weights developed in the National Educational Finance Project study. States which neither have existing data sufficient for determining cost differentials or time to undertake the acquisition of needed data might use the NEFP weights for examining how a weighted student distribution method might work in their states. Redistribution of total current expenditures using the NEFP weights would yield information about the impact on different districts. This could be done by multiplying the students served

by different programs by the NEFP weights for those programs and then dividing the total current expenditures by the weighted student total to derive the value for 1.0. Applying this vlaue for 1.0 to each district's weighted student totals for different program areas would produce the funds to be distributed to each district by program area. By summing the program area funds for each district, the total funds each district would receive could be determined and then compared to the funds actually expended in the base year used.

For actual funding purposes, there are major limitations to using the NEFP weights. First, the NEFP weights were developed as prototypes and not specifically for use by any one state. The NEFP weights are based on cost differentials for programs of districts scattered throughout the United States that were judged to have quality educational programs. The states in which these districts are located undoubtedly have a wide range of support systems, different programatic emphases, and different laws concerning the acquisition and distribution of revenues. The possible extent of these differences can be seen by comparing the NEFP weights and the Texas weights.

TABLE IX: COMPARISON OF THE NEFP WEIGHTS AND THE TEXAS WEIGHTS

PROGRAM AREA	TEXAS WEIGHT	NEFP WEIGHT
Kindergarten	1.05	1.30
Basic Elementary	1.0	1.0
Middle School	1.12	1.20
High School	1.28	1.40
Speech Handicapped	1.36,1.52,1.57	1.20
Early Childhood Spec. Ed.	1.26	----

TABLE IX CONTINUED:

PROGRAM AREA	TEXAS WEIGHT	NEFP WEIGHT
All Other Special Ed.	2.21,2.30,2.71	range of 1.90-3.25
Low Income	1.37,1.38,1.51	2.06
Non-English Speaking	1.77,1.67,1.67	----
Migrant	1.47,1.51,1.81	----
Agriculture	1.37, 1.56	----
Trades and Industries	1.29,1.47	
Homemaking	1.21, 1.38	one weight only
Cooperatives	1.23, 1.41	of 1.80
Office, D.E. and Health	1.24, 1.42	
Coordinated Vocational Academic Education	1.59, 1.82	
Vocational Handicapped	2.31, 2.64	

As can be seen above, the Texas weights differ significantly from the NEFP weights in several areas. In general, the Texas weights are smaller in almost every area than the NEFP weights. A smaller percentage of the funds spent for regular programs in Texas good practice districts was expended for special programs than in the sample districts used in the NEFP study. Similar kinds of differences might exist between the programs in another state and the NEFP weights.

Second, a set of weights based on the relative costs of actual practices in districts in the state in which a weighted pupil alternative is being considered would be more politically acceptable to those who are considering distribution alternatives and more defensible to those who question the validity of the weights themselves.

The Texas weighted pupil study proved valuable in several ways despite the time constraints and data limitations which accompanied it. First, an allocation plan which would result in the distribution

of funds to districts based on their identification of student needs and the provision of programs and services to meet those needs was explored and recommended for consideration in Texas. Second, the study is the only comprehensive examination and documentation of the relative costs of providing quality educational programs in districts selected because of their good practices and of the total cost if a similar level of support were provided for every district. The importance of these findings has already been recognize[illegible]ntributions from this part of the study were included in the Board Committee's recommended changes in the existing Foundation School Program. Prior to the completion of this study, the recommended changes were based on what would be necessary to align the Foundation School Program staffing ratios and operating expenses with the average actual practices of Texas districts. Because the weighted pupil study focused on the provision of quality programs and data about the quality programs had been gathered in conjunction with the study, the Board Committee was able to recommend changes in the existing system which were based on quality rather than average practices of Texas districts.

EVALUATION OF THE WEIGHTED STUDENT METHODOLOGY

At a time when educators and laymen alike are endeavoring to find ways to enable the nation's schools to meet flexibly the individual educational needs of each school-age child, an allocation system based on the varying costs of providing for these needs has great merit and, consequently, has garnered a great deal of interest. To date, the weighted pupil methodology as developed by the National Educational Finance Project staff is the best conceptualization of how a state desiring to provide funds for meeting different student needs might do so. However, the weighted pupil methodology does contain some inherent weaknesses which states should be cognizant of when considering its adoption for the allocation of funds. The most important of these are discussed below.

Although a weighted student distribution plan can be grounded in the provision of quality programs, the concept of quality which has been used in past applications of the methodology is narrow. Quality programs, as identified and costed in both the NEFP prototype and Texas studies, were chosen on the basis of consideration of what exists rather than what ought to exist. To a large extent, what exists presently is more a function of the present system rather than a rationale determination of what should exist. For example, the quality of the programs of the twenty-eight good practice districts was limited by the level of State funds and local enrichment available to them as well as by the various systemic and legal constraints under which each Texas district operates. Programatically,

what is, even if considered to be quality, is not what necessarily ought to be or even what might be if these constraints did not exist or were different. Perhaps, it may not be until the "what ought to be" can be described and costed that a support system which is based on quality can be developed and operationalized to achieve the intended results in terms of the products of the education system.

Another issue involved in the concept of quality is the relationship between dollars and quality. The assumption upon which both the NEFP and Texas studies were based was that, if a level of support similar to that found in the twenty-eight good practice districts could be provided for all districts, every district would be able to provide programs similar in quality and product to those of the good practice districts. In other words, similar dollar inputs should result in similar products. This assumption excludes the possibility that other variables, unrelated to either the level of support available or actual expenditures, may well be the major determinants of quality.

The uncertainties about what quality education is, what it ought to be, and the relationship between dollars and quality are not the sole province of the weighted pupil concept but have been raised about other distribution alternatives in which the achievement of quality is sought in a systematic way. However, no distribution plan should either be recommended or adopted as the answer to the quest for quality until the major determinants of quality have been identified and examined by both educators and the

public. In addition to providing information about relative costs of different programs, future weighted pupil studies which are based on good practices could extend existing knowledge about the variables of quality by delineating those which seem to be the most important in the districts used in the cost studies.

Another area of concern about the weighted pupil concept is its administration. The Texas study, like the NEFP study, did not encompass how a district would be required to spend its funds. As discussed earlier, guidelines could be written which would direct that a district spend the funds it receives for each child only for the provision of educational programs for that child or that the funds be expended in the program area for which they were allotted. Guidelines such as these could easily encourage the flourishing of categorical programs very similar to the ones perpetuated by the allocation of Federal funds since 1965. Guidelines of this nature might engender criticism, similar to that which has been levied against categorical funding in the past, by those who feel that such funding encourages districts to respond separately to each educational need of a child rather than meeting his needs in a flexible integrated approach which is individually tailored to each child and his needs.

Conversely, more flexible guidelines could be promulgated in which districts would be delegated the responsibility for deciding how to spend their allocated funds. This kind of approach was envisioned by the Governor's Citizens' Committee on Education in Florida which, in recommending the use of weights for funding

purposes said:

> We stress that while districts should be free to spend the ESP money they earn from their weighted FTE pretty much in the ways they determine, a district can only earn weighted FTE for a special program by by having the students actually enrolled in such a program meeting state standards.[18]

However, it is conceivable that a flexible approach to the expenditure of funds once they are received, as outlined above, might lead to further court litigations brought by parents who believe that their districts are not spending what they receive for their children on specific programs for their children. In addition, the provision of too much flexibility might serve to undermine the reasons for distributing funds on a weighted student basis.

Another potential problem area for states which are considering the adoption of a weighted student approach to the distribution of funds concerns how the weights and the value for 1.0 would be updated after the system were operaationalized and the initial allocations were made. It is true that cost of living adjustments for inflation could be made relatively simply but other changes, especially those involving adjustments in the relationships betwen weights, would be more difficult. This would be particularly true if no local enrichment were allowed and if districts were given little or no flexibility as to how they might spend their allocations. If these two conditions existed, the weighted pupil allocation system would be locked into itself and, although the absolute values of the weights could be changed, the relationships between the weights would remain static and be perpetuated by the system. This would

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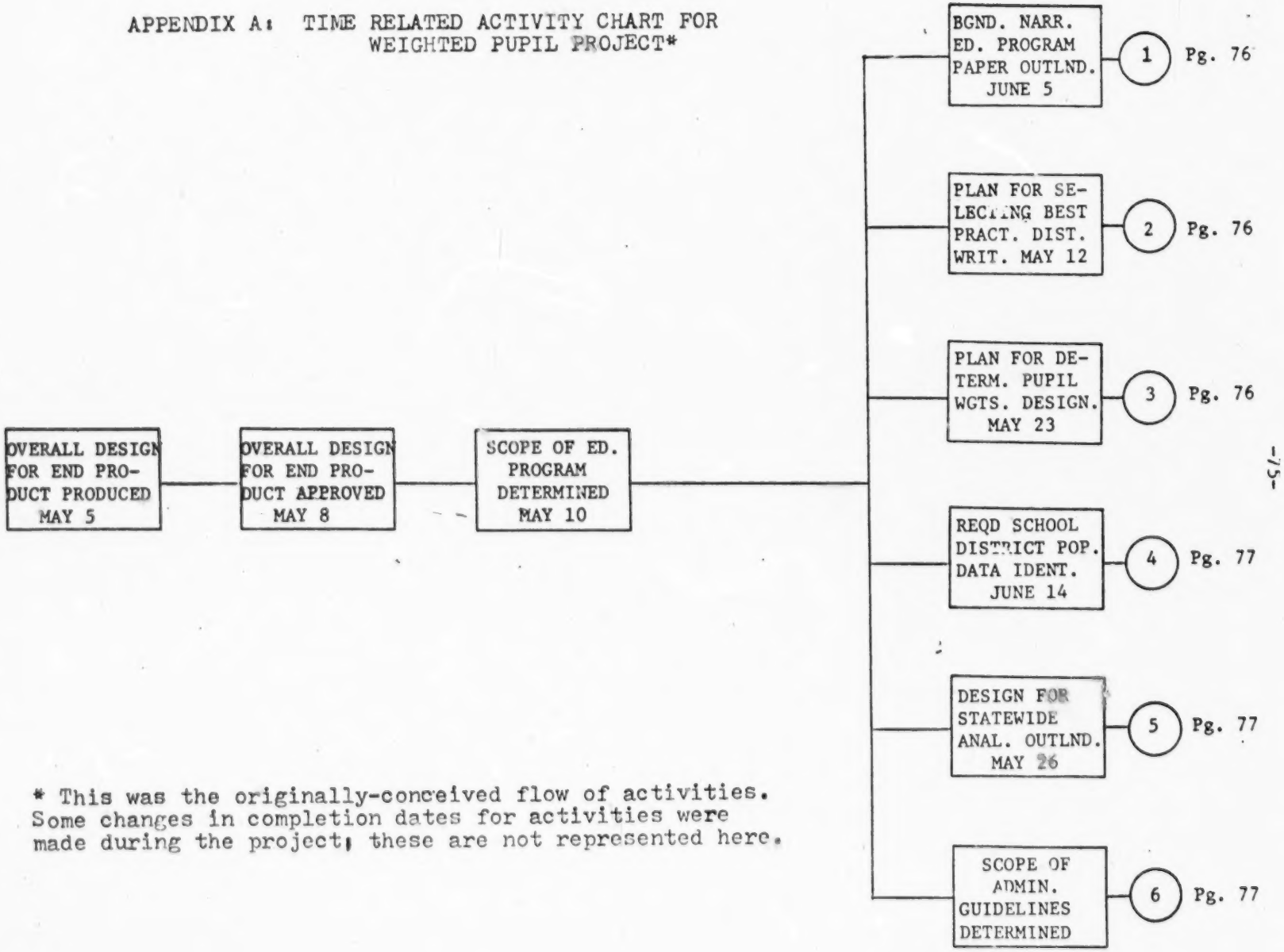
18/Governor's Citizens' Committee on Education, Improving Education in Florida, Tallahassee, Florida, March 15, 1973, p. 118.

result because all districts would be spedning the same relative and absolute amounts for their students, thus dissipating any changes which might have occurred if districts were able to determine their own expenditure patterns.

The overarching purpose of this paper was to document the procedures used in adapting the NEFP weighted pupil methodology to Texas and to examine both the general and specific problems which were encountered during the adaptation. It is hoped that the analyses and evaluation of the weighted pupil methodology contained herein will be of benefit to others which are either considering the development of a similar school financing alternative or are examining possible refinements to the existing weighted pupil methodology. Although changes in present allocation systems, which have proved workable over several decades in spite of their inequities, will be difficult perhaps to achieve immediately, particularly without the existence of court mandates in all states, the exploration of other alternatives such as the weighted pupil method and familiarization with the advantages and disadvantages of each should lead to more fundamental and far-reaching changes in the future.

APPENDICES

APPENDIX A: TIME RELATED ACTIVITY CHART FOR WEIGHTED PUPIL PROJECT*


OVERALL DESIGN FOR END PRODUCT PRODUCED MAY 5
OVERALL DESIGN FOR END PRODUCT APPROVED MAY 8
SCOPE OF ED. PROGRAM DETERMINED MAY 10
BGND. NARR. ED. PROGRAM PAPER OUTLND. JUNE 5
1
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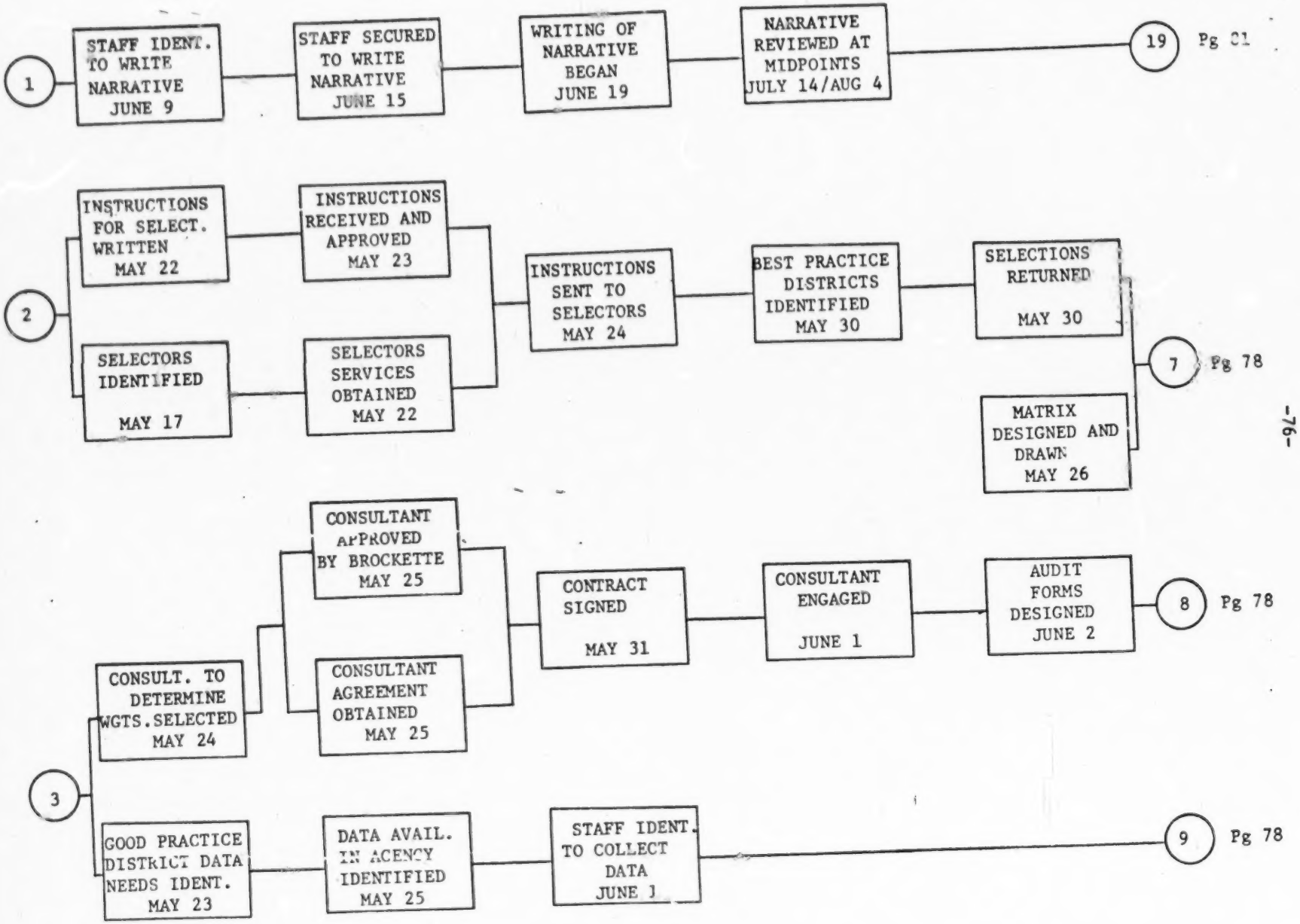
PLAN FOR SELECTING BEST PRACT. DIST. WRIT. MAY 12
2
Pg. 76
PLAN FOR DETERM. PUPIL WGTS. DESIGN. MAY 23
3
Pg. 76
REQD SCHOOL DISTRICT POP. DATA IDENT. JUNE 14
4
Pg. 77
DESIGN FOR STATEWIDE ANAL. OUTLND. MAY 26
5
Pg. 77
SCOPE OF ADMIN. GUIDELINES DETERMINED
6
Pg. 77

* This was the originally-conceived flow of activities. Some changes in completion dates for activities were made during the project; these are not represented here.


1
STAFF IDENT. TO WRITE NARRATIVE JUNE 9
STAFF SECURED TO WRITE NARRATIVE JUNE 15
WRITING OF NARRATIVE BEGAN JUNE 19
NARRATIVE REVIEWED AT MIDPOINTS JULY 14/AUG 4
19
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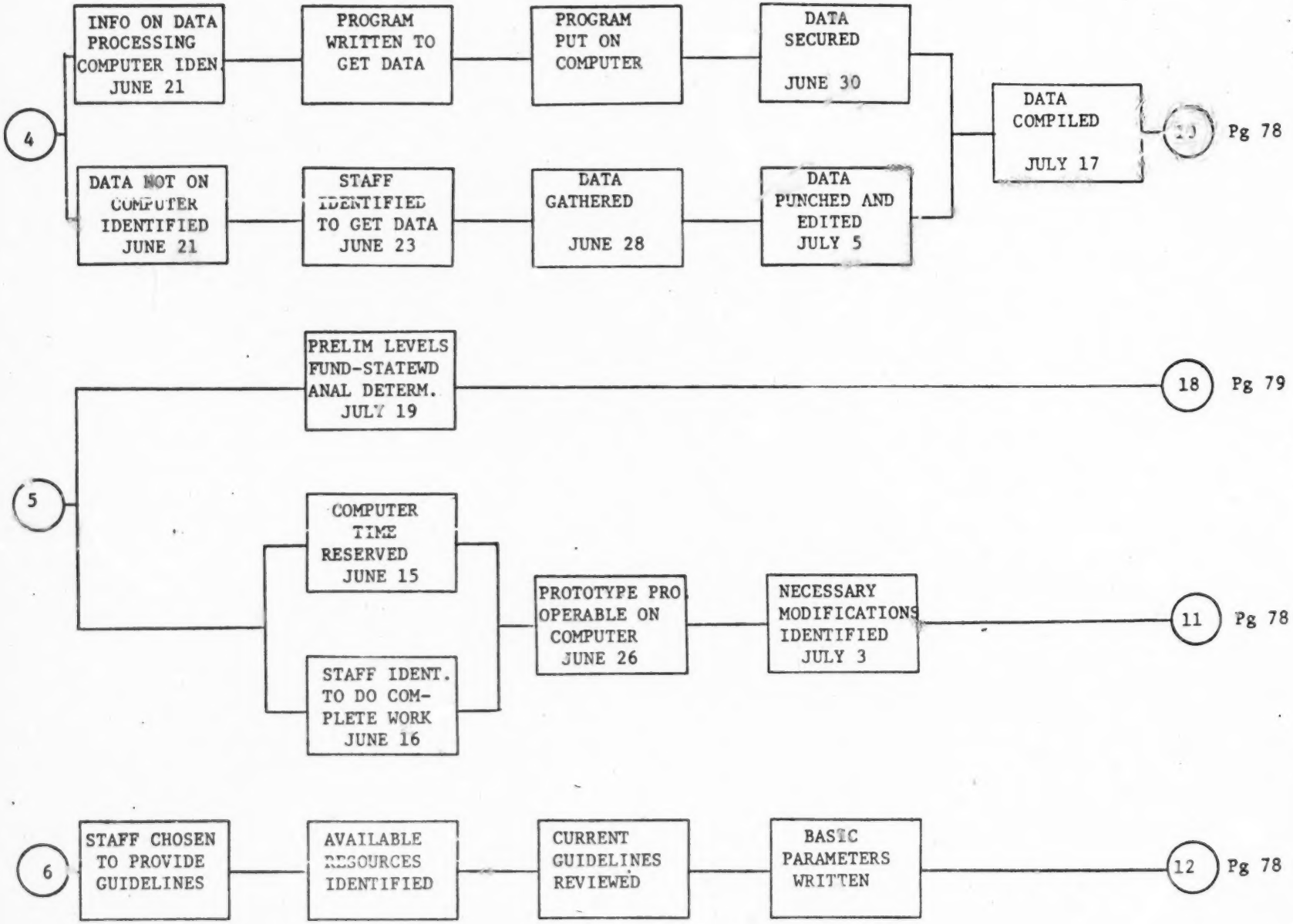
2
INSTRUCTIONS FOR SELECT. WRITTEN MAY 22
INSTRUCTIONS RECEIVED AND APPROVED MAY 23
SELECTORS IDENTIFIED MAY 17
SELECTORS SERVICES OBTAINED MAY 22
INSTRUCTIONS SENT TO SELECTORS MAY 24
BEST PRACTICE DISTRICTS IDENTIFIED MAY 30
SELECTIONS RETURNED MAY 30
MATRIX DESIGNED AND DRAWN MAY 26
7
Pg 78
3
CONSULT. TO DETERMINE WGTS. SELECTED MAY 24
CONSULTANT APPROVED BY BROCKETTE MAY 25
CONSULTANT AGREEMENT OBTAINED MAY 25
CONTRACT SIGNED MAY 31
CONSULTANT ENGAGED JUNE 1
AUDIT FORMS DESIGNED JUNE 2
8
Pg 78
GOOD PRACTICE DISTRICT DATA NEEDS IDENT. MAY 23
DATA AVAIL. IN ACENCY IDENTIFIED MAY 25
STAFF IDENT. TO COLLECT DATA JUNE 1
9
Pg 78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INFO ON DATA PROCESSING COMPUTER IDEN JUNE 21
PROGRAM WRITTEN TO GET DATA
PROGRAM PUT ON COMPUTER
DATA SECURED JUNE 30
DATA NOT ON COMPUTER IDENTIFIED JUNE 21
STAFF IDENTIFIED TO GET DATA JUNE 23
DATA GATHERED JUNE 28
DATA PUNCHED AND EDITED JULY 5
DATA COMPILED JULY 17
20
Pg 78
5
PRELIM LEVELS FUND-STATEWD ANAL DETERM. JULY 19
18
Pg 79
COMPUTER TIME RESERVED JUNE 15
STAFF IDENT. TO DO COMPLETE WORK JUNE 16
PROTOTYPE PRO OPERABLE ON COMPUTER JUNE 26
NECESSARY MODIFICATIONS IDENTIFIED JULY 3
11
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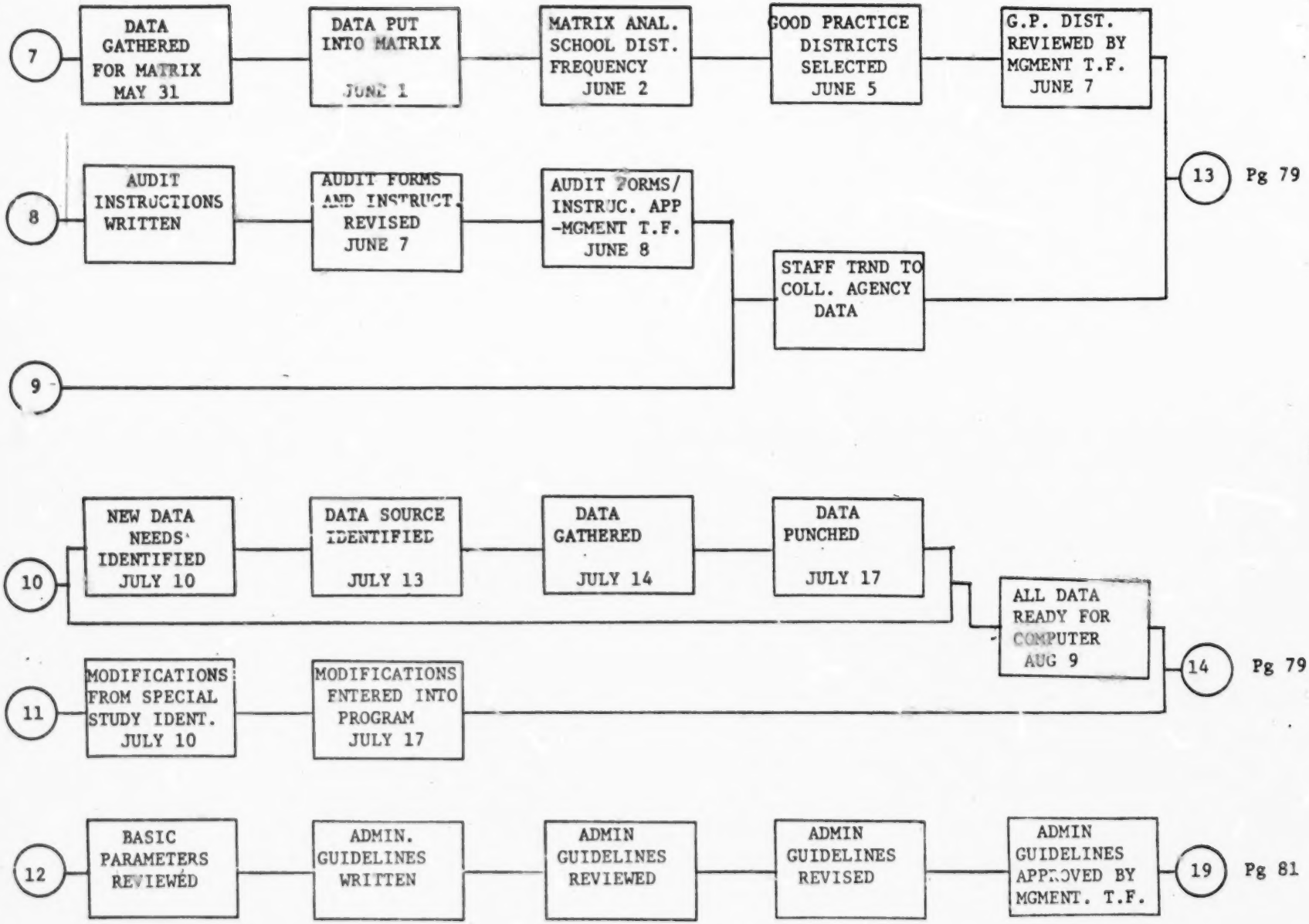
6
STAFF CHOSEN TO PROVIDE GUIDELINES
AVAILABLE RESOURCES IDENTIFIED
CURRENT GUIDELINES REVIEWED
BASIC PARAMETERS WRITTEN
12
Pg 78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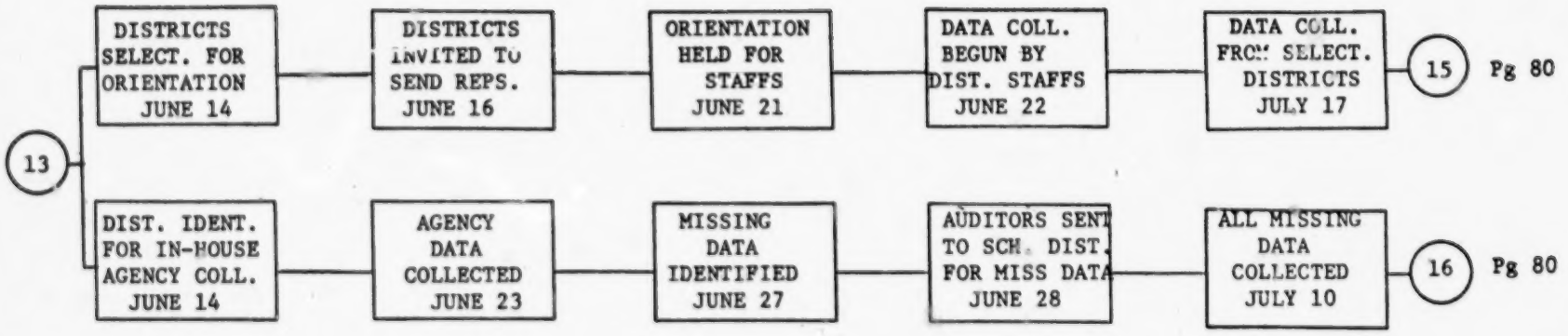
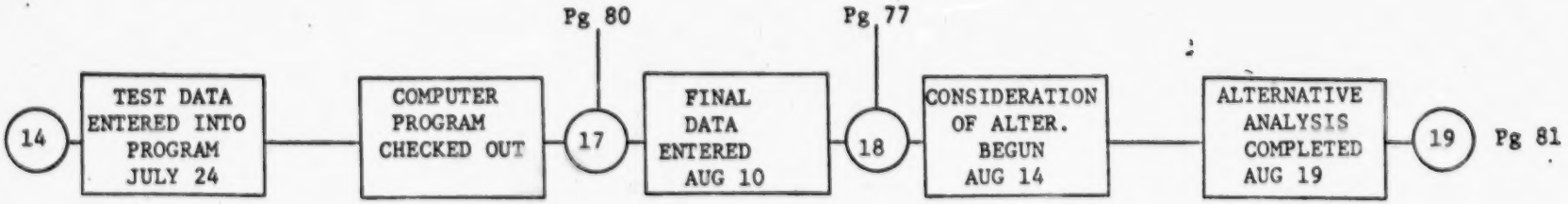
DATA GATHERED FOR MATRIX MAY 31
DATA PUT INTO MATRIX JUNE 1
MATRIX ANAL. SCHOOL DIST. FREQUENCY JUNE 2
GOOD PRACTICE DISTRICTS SELECTED JUNE 5
G.P. DIST. REVIEWED BY MGMENT T.F. JUNE 7
13
Pg 79
8
AUDIT INSTRUCTIONS WRITTEN
AUDIT FORMS AND INSTRUCT. REVISED JUNE 7
AUDIT FORMS/ INSTRUC. APP -MGMENT T.F. JUNE 8
STAFF TRND TO COLL. AGENCY DATA
9
10
NEW DATA NEEDS IDENTIFIED JULY 10
DATA SOURCE IDENTIFIED JULY 13
DATA GATHERED JULY 14
DATA PUNCHED JULY 17
ALL DATA READY FOR COMPUTER AUG 9
14
Pg 79
11
MODIFICATIONS FROM SPECIAL STUDY IDENT. JULY 10
MODIFICATIONS ENTERED INTO PROGRAM JULY 17
12
BASIC PARAMETERS REVIEWED
ADMIN. GUIDELINES WRITTEN
ADMIN GUIDELINES REVIEWED
ADMIN GUIDELINES REVISED
ADMIN GUIDELINES APPROVED BY MGMENT. T.F.
19
Pg 81


DISTRICTS SELECT. FOR ORIENTATION JUNE 14
DISTRICTS INVITED TO SEND REPS. JUNE 16
ORIENTATION HELD FOR STAFFS JUNE 21
DATA COLL. BEGUN BY DIST. STAFFS JUNE 22
DATA COLL. FROM SELECT. DISTRICTS JULY 17
15
Pg 80
13
DIST. IDENT. FOR IN-HOUSE AGENCY COLL. JUNE 14
AGENCY DATA COLLECTED JUNE 23
MISSING DATA IDENTIFIED JUNE 27
AUDITORS SENT TO SCH. DIST. FOR MISS DATA JUNE 28
ALL MISSING DATA COLLECTED JULY 10
16
Pg 80


Pg 80
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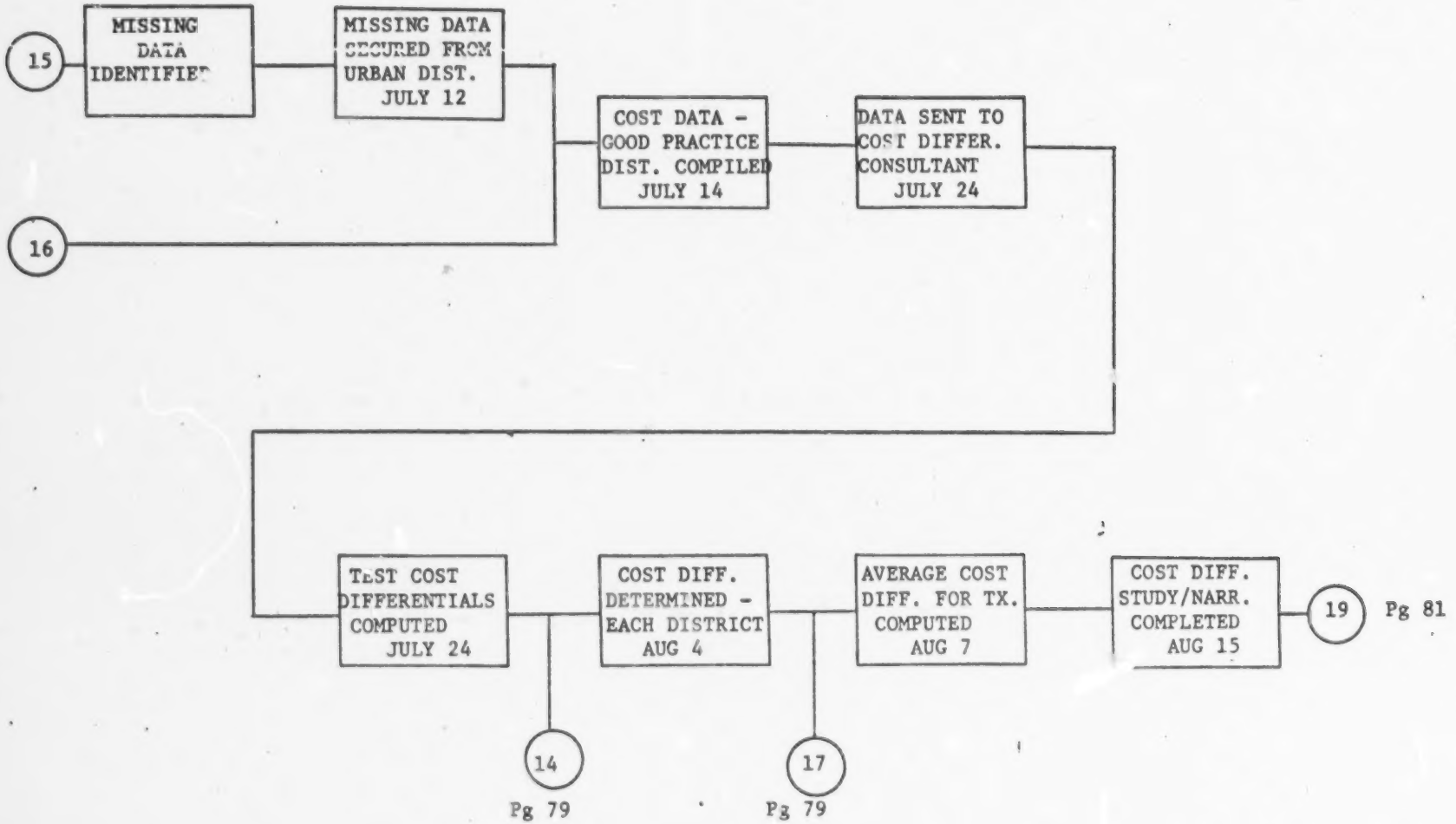
14
TEST DATA ENTERED INTO PROGRAM JULY 24
COMPUTER PROGRAM CHECKED OUT
17
FINAL DATA ENTERED AUG 10
18
CONSIDERATION OF ALTER. BEGUN AUG 14
ALTERNATIVE ANALYSIS COMPLETED AUG 19
19
Pg 81


15
MISSING DATA IDENTIFIED
MISSING DATA SECURED FROM URBAN DIST. JULY 12
16
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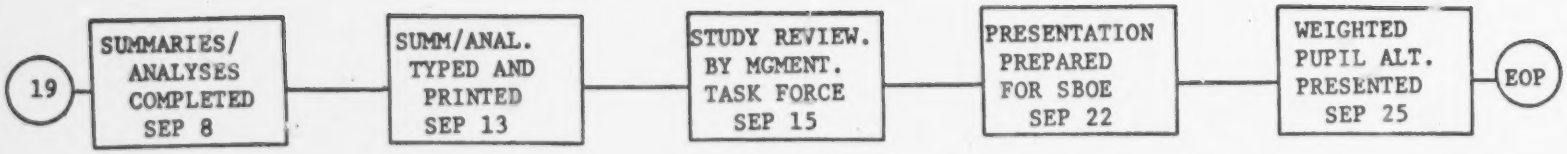
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APPENDIX B: NOMINATION INSTRUCTIONS FOR BEST PRACTICE DISTRICTS

Texas Education Agency

201 East Eleventh Street
Austin, Texas
78701

• STATE BOARD OF EDUCATION
• STATE COMMISSIONER OF EDUCATION
• STATE DEPARTMENT OF EDUCATION

INTER-OFFICE COMMUNICATION

TO:

FROM: J. B. Morgan

DATE:

SUBJECT: Instructions for Identifying Best Practice Districts

Thank you for agreeing to nominate thirty districts with best practice programs in Texas in the areas of _____ _____. The nominations which you, other members of the Agency, and Education Service Center Directors make will be analyzed in order to determine the thirty school districts which have the most nominations. These thirty comprehensive best practice districts will be used to determine the relative costs of educating different student populations. These weights will be the basis for the development of the school finance alternative (6.1-4) which would provide funds to each school district based on identified student populations.

The information on the second page is provided for you to use when making your nominations. Please let us know if you have any questions. All nominations should be returned to the Office of Urban Education by Tuesday, May 30.

INSTRUCTIONS FOR NOMINATING DISTRICTS
WITH BEST PRACTICES

1. Please nominate thirty districts in each of the following areas:

2. Districts should be nominated which have the best comprehensive program in each of the areas listed in #1.

3. Please try to include school districts of various sizes and localities, if possible. However, the first selection criteria should be "best practice."

4. List your nominations on the attached sheet. All thirty nominations will be treated equally so do not worry abour ranking them.

5. Please try to make close to, but not more than, thirty nominations.

6. Please do not nominate a cooperative arrangement between school districts.

7. Once the nominations are agreed upon, please list them on the sheets provided and return the sheets to the Office of Urban Education by Tuesday, May 30.

8. Remember that the thirty districts selected from the nominations will be used only for gathering cost information for developing one of the school finance alternatives.

Thank you for your help. If you have any questions or problems, please call the Office of Urban Education.

Texas Education Agency

• STATE BOARD OF EDUCATION
• STATE COMMISSIONER OF EDUCATION
• STATE DEPARTMENT OF EDUCATION

201 East Eleventh Street
Austin, Texas
78701

May 24, 1972

Mr. Harold Dooley
Executive Director
Region I Education Service Center
101 South Tenth Street
Edinburg, Texas 78539

Dear Mr. Dooley:

The State Board of Education at its January meeting assumed major responsibility for submitting a new public education finance plan to the Legislature for its consideration during the next regular session. The staff of the Agency is currently developing three alternative financing plans which will be considered by the Board early next fall. One of these alternatives is based on a weighted pupil approach.

The differing costs of educating students in various population groups such as kindergarten, vocational and special education will be determined for each of thirty Texas school districts. These costs will then be converted into relative weights which will be the basis for the development of a weighted student alternative finance plan.

Because of your knowledge of districts within your region and because of the need to have regional representation among the thirty school districts chosen, we are asking each Education Service Center Director to nominate five school districts in his region which he considers to be "comprehensive best practice" following the instructions given on the enclosed sheet. These nominations will be considered with the nominations made by Agency staff and the thirty districts with the most nominations will be selected.

drive

We would appreciate your assistance in making these nominations. The information on the enclosed sheet is provided for you to use when making your nominations. On Thursday, June 1, 1972, a member of the staff of the Office of Urban Education will call you for your five nominations. If you will not be in on Thursday, please leave your nominations with your secretary or call the Office of Urban Education at (512) 475-1838 earlier in the week.

Thank you for your cooperation. Please contact the Office of Urban Education if you have any questions.

Sincerely yours,

Alton Bowen
Assistant Commissioner for
Regional Education Services

J. B. Morgan
Assistant Commissioner
for Urban Education

INSTRUCTIONS FOR NOMINATING COMPREHENSIVE BEST PRACTICE DISTRICTS

1. Please nominate five districts from your Service Center region which you consider to have the following characteristics:

   - provide outstanding or very high quality kindergartens and grades 1-12 general programs;
   - provide high quality comprehensive vocational, special and adult education programs;
   - meet the educational needs, in an outstanding way, of low-income, non-English speaking, migrant and gifted students in their districts.

2. Please try to include school districts of various sizes. However, the primary selection criteria should be those qualities listed above.

3. All nominations will be treated equally so do not rank them. Please do not make more than five nominations.

Return to:

J. B. Morgan
Assistant Commissioner for
Urban Education
Texas Education Agency
201 East Eleventh Street
Austin, Texas 78701
(512) 475-1838

A STUDY OF PUBLIC SCHOOL FINANCE

-Program Cost Analysis-

DATA FORM I

DISTRIBUTION OF PUPILS, STAFF,
AND CURRENT OPERATING EXPENDITURES
BY PROGRAMS IN REGULAR SCHOOL YEAR

School Year 1970-71

School District _____

Superintendent _____

Address _____

_____

Contact Name _____

Telephone Number _____

Revised 6/21/72

SECTION I

	PUPIL Average Daily Membership IN DAY SCHOOL PROGRAMS (EXCLUDE PART-TIME AND EVENING PROGRAMS) (1)	Program Level: Pre-First Grade (2)	Elementary School (3)	Middle School (4)	High School (5)	Total (6)
1.0	Number Days in Regular School Year (Exclude Summer School)					
2.0	Length of Average Full-Day Program: Hours and Minutes					
3.0	Gross Total ADM					
4.0	Pre-Kindergarten: Total ADM (Use full head count)					
5.0	Kindergarten: Total ADM (Use full head count)					
6.0	Programs for Special Education Students: Total ADM					
6.1	Speech Handicapped					
6.2	Early Childhood					
6.3	All Other					
6.4						
6.5						
6.6						
6.7						
6.8						
6.9						
6.10						

SECTION I PUPIL — AVERAGE DAILY MEMBERSHIP, IN DAY SCHOOL PROGRAMS (EXCLUDE PART-TIME AND EVENING PROGRAMS) (1)	Program Level: Pre-First Grade (2)	Elementary School (3)	Middle School (4)	Secondary School (5)	Total (6)
8.0 Remedial and Compensatory Programs for :					
in Total ADM					
8.1 Low Income Pupils					
8.2 Non-English Speaking Pupils					
8.3 Migrant Pupils					
9.0 Vocational-Technical Education Classes: Total FTE Pupil in ADM (See instructions for counting FTE's)					
9.1 Agriculture--Pupil FTE's					
9.2 Home making --Pupil FTE's					
9.3 Trade and Industrial--Pupil FTE's					
9.4 Office, Distributive, and Health Education --Pupil FTE's					

SECTION I PUPIL — AVERAGE DAILY MEMBERSHIP, IN DAY SCHOOL PROGRAMS (EXCLUDE PART-TIME AND EVENING PROGRAMS) (1)	Grade or Program Level: Pre-First Grade (2)	Elementary School (3)	Middle School (4)	High School (5)	Total (6)
9.5 Cooperative --Pupil FTE's					
9.6 Handicapped --Pupil FTE's					
9.7 CVAE --Pupil FTE's					
10.0 Total Net Number of Pupils in Regular Day School Programs: Enrollment in ADM (Item 3.0 Minus Items 4.0, 5.0, 6.0, 8.0 and 9.0)					

Data Form I

SECTION II NUMBER (FTE)

Grade Level (check one):
A. Elementary School _____
B. Middle School _____
C. High School _____

Item No. (1)	Program (For Target Groups of Pupils in Section I) (2)	Instructional: Regular Teachers (3)	Instructional: Special Teachers (4)	Non-Teaching, Supportive Staff: Adm. & Supv. (5)	Coun-selors (6)	Psy. & Soc. Workers (7)	Librar-ians (8)	Teacher Aides (9)	Other (10)	Total Supportive Staff (11)	Grand Total Staff Columns 3 + 4 + 11 (12)
3.0	Gross Total Staff (FTE) . . .										
4.0	Pre-Kindergarten										
5.0	Kindergarten										
6.0	Programs for Special Education Students - Total . . .										
	6.1 Speech Handicapped . . .										
	6.2 Early Childhood . . .										
	6.3 All Other . . .										
	6.4 _____ . . .										
	6.5 _____ . . .										
	6.6 _____ . . .										
	6.7 _____ . . .										
	6.8 _____ . . .										
	6.9 _____ . . .										
	6.10 _____ . . .										

Item No. (1)	Program (For Target Groups of Pupils in Section I) (2)	Instructional: Regular Teachers (3)	Instructional: Special Teachers (4)	Non-Teaching, Supportive Staff: Adm. & Supv. (5)	Counselors (6)	Psy. & Soc. Workers (7)	Librarians (8)	Teacher Aides (9)	Other (10)	Total Supportive Staff (11)	Grand Total Staff Columns 3 + 4 + 11 (12)
8.0	Remedial and Compensatory Programs for: Total -- . . .										
8.1	Low Income Pupils . . .										
8.2	Non-English Speaking Pupils										
8.3	Migrant Pupils . . .										
9.0	Vocational and Technical - Total -										
9.1	Agriculture										
9.2	Home making										
9.3	Trade and Industrial.										

Item No. (1)	Program (For Target Groups of Pupils in Section I) (2)	Instructional: Regular Teachers (3)	Instructional: Special Teachers (4)	Non-Teaching, Supportive Staff: Adm. & Supv. (5)	Counselors (6)	Psy. & Soc. Workers (7)	Librarians (8)	Teacher Aides (9)	Other (10)	Total Supportive Staff (11)	Grand Total Staff Columns 3 + 4 + 11 (12)
	9.4 Office, Distributive, and Health Education										
	9.5 Cooperative . . .										
	9.6 Handicapped . . .										
	9.7 CVAE . . .										
10.0	Regular Day School Programs -Total Net FTE's- (Item 3.0 Minus Items 4.0, 5.0, 6.0, 8.0 and 9.0) . . .										

Data Form I

SECTION III TOTAL SALARIES OF Instructional and Supportive Staff Reported in Section II

Grade Level (check one):
A. Elementary School ____
B. Middle School ____
C. High School ____

Item No. (1)	Program (For Target Groups of Pupils in Section I) (2)	Instructional: Regular Teachers (3)	Instructional: Special Teachers (4)	Non-Teaching, Supportive Staff: Adm. & Supv. (5)	Counselors (6)	Psy. & Soc. Workers (7)	Librarians (8)	Teacher Aides (9)	Other (10)	Total Supportive Staff (11)	Grand Total Salaries Columns 3 + 4 + 11 (12)
3.0	Gross Total Salaries . . .										
4.0	Pre-Kindergarten . . .										
5.0	Kindergarten . . .										
6.0	Programs for Special Education Students - Total . . .										
6.1	Speech Handicapped . . .										
6.2	Early Childhood . . .										
6.3	All Other . . .										
6.4	. . .										
6.5	. . .										
6.6	. . .										
6.7	. . .										
6.8	. . .										
6.9	. . .										
6.10	. . .										

Item No. (1)	Program (For Target Groups of Pupils in Section II) (2)	Instructional: Regular Teachers (3)	Instructional: Special Teachers (4)	Non-Teaching, Supportive Staff: Adm. & Supv. (5)	Counselors (6)	Psy. & Soc. Workers (7)	Librarians (8)	Teacher Aides (9)	Other (10)	Total Supportive Staff (11)	Grand Total Salaries Columns 3 + 4 + 11 (12)
8.0	Remedial and Compensatory Programs for: . . . Total										
8.1	Low Income Pupils . . .										
8.2	Non-English Speaking Pupils . . .										
8.3	Migrant Pupils . . .										
9.0	Vocational and Technical - Total										
9.1	Agriculture										
9.2	Homemaking										
9.3	Trade and Industrial										

Item No. (1)	Program (For Target Groups of Pupils in Section V) (2)	Instructional: Regular Teachers (3)	Instructional: Special Teachers (4)	Non-Teaching, Supportive Staff: Adm. & Supv. (5)	Counselors (6)	Psy. & Soc. Workers (7)	Librarians (8)	Teacher Aides (9)	Other (10)	Total Supportive Staff (11)	Grand Total Salaries Columns 3+4+11 (12)
9.4	Office, Distributive, and Health Education . . .										
9.5	Cooperative . . .										
9.6	Handicapped . . .										
9.7	CVAE . . .										
10.0	Regular Day School Programs--Total Salaries (Item 3.0 Minus Items 4.0, 5.0, 6.0, 8.0 and 9.0) . . .										

Data Form I

SECTION IV DISTRIBUTION OF CURRENT OPERATING EXPENDITURES OTHER THAN SALARIES IN SECTION III. (EXCLUDE CAPITAL OUTLAY AND DEBT SERVICE PAYMENTS)

Grade Level (check one):
A. Elementary School
B. Middle School
C. High School

Item No. (1)	Program (2)	Adm., General Control & Security (3)	Instructional Supplies, Clerical, Other (4)	Operation & Maintenance of Plant (5)	Transportation (6)	Food Services (7)	Other Auxiliary Services, Including Health (8)	Fixed Charges, Soc.Sec. & Retirement (9)	Community Services (10)	Total Curr. Exp. Other Than Salaries In Section III (11)	Grand Total Curr. Exp. (Col.11,Sec.IV Plus Col.12,Sec.III) (12)
3.0	Total Curr. Exp. other than salaries in Section III										
4.0	Pre-Kindergarten.										
5.0	Kindergarten.										
6.0	Programs for Special Education Students- Total. . .										
	6.1 Speech Handicapped . . .										
	6.2 Early Childhood . . .										
	6.3 All Other . . .										
	6.4 _____ . . .										
	6.5 _____ . . .										
	6.6 _____ . . .										
	6.7 _____ . . .										
	6.8 _____ . . .										
	6.9 _____ . . .										
	6.10 _____ . . .										

Item No. (1)	Program (2)	Adm., General Control & Security (3)	Instructional Supplies, Clerical, Other (4)	Operation & Maintenance of Plant (5)	Transportation (6)	Food Services (7)	Other Auxiliary Services, Including Health (8)	Fixed Charges, Soc.Sec. & Retirement (9)	Community Services (10)	Total Curr. Exp. Other Than Salaries In Section III (11)	Grand Total Curr. Exp. (Col.11,Sec.IV Plus Col.12,Sec.III) (12)
8.0	Remedial and Compensatory Programs for: - Total -										
8.1	Low Income Pupils . . .										
8.2	Non-English Speaking Pupils										
8.3	Migrant Pupils . . .										
9.0	Vocational and Technical - Total -										
9.1	Agriculture.										
9.2	Home making										
9.3	Trade and Industrial										
9.4	Office, Distributive, and Health Education . .										

Item No. (1)	Program (2)	Adm., General Control & Security (3)	Instructional Supplies, Clerical, Other (4)	Operation & Maintenance of Plant (5)	Transportation (6)	Food Services (7)	Other Auxiliary Services, Including Health (8)	Fixed Charges, Soc.Sec. & Retirement (9)	Community Services (10)	Total Curr. Exp. Other Than Salaries In Section III (11)	Grand Total Curr. Exp. (Col.11,Sec.IV Plus Col.12,Sec.III) (12)
9.5	Cooperative . . .										
9.6	Handicapped . . .										
9.7	CVAE . . .										
10.0	Regular Day School Programs--Grades 1-12--Current Expend. (Item 3.0 Minus Items 4.0, 5.0, 6.0, 8.0 and 9.0) . . .										
11.0	Unallocated Service Programs Item 3.0 Minus Items 4.0, 5.0, 6.0, 8.0, 9.0 and 10.0)										

A STUDY OF PUBLIC SCHOOL FINANCE

-Program Cost Analysis-

TEXAS INSTRUCTIONS

This Form is designed to obtain a distribution of pupils, staff, and current operating expenditures for the Day School programs during the "Regular" School Year to compute program cost differentials. This definition excludes summer school and part-time programs for dropouts and adult-continuing education. Grades (or equivalent levels) for Elementary, Middle, and Secondary schools may be indicated according to the organization in the districts in a particular state.

Note that the forms have been modified to take account of the following specific decisions.

1) The grade level pattern has been established as:
   Elementary
   Middle
   High School

   The district may define these categories according to the patterns which exist in the district.

2) Pupil enrollments are to be in Average Daily Membership. If the precise information is not available then please make estimates.

3) Item 7.0 has been omitted from the forms.

Section I

Item 1.0 Days of Attendance should by 180 for most all Texas programs.

Item 2.0 Time pupils report until their dismissal. In pre-first grade programs indicate whether these are half-day (double sessions per teacher), or full day (single session per teacher).

Item 3.0 Use the total official Average Daily Membership (ADM) of the school year. This item should equal the sum of Items 4.0, 5.0, 6.0, 8.0, 9.0, and 10.0.

Item 4.0 & Item 5.0 — Use full head count of ADM, regardless of whether program is half-day or full day, but be sure to indicate the length of day as half day or full day.

Exclude pupils enrolled in special education programs below first grade.

Item 6.0 — Each pupil assigned to classes in special education programs should be counted 1.0 FTE even though in some cases pupils may spend some time in "non-segregated" activities. The total in 6.0 should equal the sum of sub-programs 6.1 thru 6.3. Only the following programs are to be broken out:

6.1 speech handicapped
6.2 early childhood and other pre-first grade programs
6.3 all other special education programs

Item 7.0 — This item has been omitted from the Texas study.

Item 8.0 — Count each pupil assigned to a remedial and compensatory program as 1.0 FTE. Three specific program breakdowns are requested.

8.1 Compensatory programs for the low income
8.2 Programs specifically designed for the non-English speaking
8.3 Programs specifically designed for migrant children

Within the general category of remedial and compensatory programs students may well be enrolled in more than one of the three sub-programs listed. Duplication of this sort is allowed. However, the total of remedial and compensatory programs must be an unduplicated count.

Item 9.0 — In vocational education programs the number of course credit units in the vocational classes of the enrollees determines the FTE's. For example, if 100 pupils are enrolled in the vocational program with an average of half of their total course credit load in the designated vocational classes, they would be counted as 50 FTE in the vocational program and 50 FTE in the "Basic" program. If another 100 pupils are enrolled with an average of one-fourth of their total course credit load in the designated vocational

classes, they would be counted as 25 FTE in the vocational program and 75 FTE in the "Basic" program. In this example, the total enrollment (ADM or ADA) shown in Item 9.0 would be 75 FTE pupils and not the 200. The remaining 125 FTE's would appear in Item 10.0 as Basic Program FTE's.

The following program breakdowns are requested:

9.1 Agriculture including all courses except those in the CVAE, Handicapped, and Cooperative programs

9.2 Homemaking including all of the courses except those in the CVAE, Handicapped, and Cooperative programs

9.3 Trades and Industries including all courses except those in the CVAE and Handicapped programs

9.4 Office, Distribution, and Health including all courses except those in the CVAE, Handicapped, and Cooperative programs

9.5 Cooperative including all courses classified as cooperative in each of the basic four areas listed above

9.6 Handicapped

9.7 Coordinated Vocational/Academic Education (CVAE)

For vocational courses count only those programs which are receiving aid under the Foundation School Program.

Item 10.0 The total number of pupils in Item 10.0 is the net or residual number after deducting the numbers in the subtotals of the designated programs from the gross totals in Item 3.0.

Section II,III, and IV

These sections will provide information on staff, salaries, and other costs. Note that each section is subdivided into the three basic program levels and thus there are three major subsections for each section.

In both Section II and III proration of staff and salaries on the basis of district averages is permitted in place of actual information. Thus for the count of personnel assigned to a specific program, the overall district average personnel ratio for that subsection (elementary, middle, and high school) may be used to determine the "regular teacher" allocation.

Section II

Section II is designed with duplicate pages to provide a distribution of all instructional and supportive staff in FTE's (full-time equivalents) to designated programs at elementary, middle, and secondary levels.

A person teaching part-time and performing other duties as part of his position would be prorated according to normal work loads in the respective areas of grade levels.

Non-teaching personnel such as principals, supervisors, librarians, and counselors assigned to schools and programs would have their non-teaching time prorated proportionately to the number of teachers (FTE) they serve, including special and basic programs.

Item 3.0 This line should be a breakdown of all instructional and supportive professional staff plus teacher aides. For the purpose of computing staff FTE's the full work load includes time spent in class and other assigned activities. Do not count substitute teachers unless they are filling a position.

For most of the categories of personnel, the definition is left to the local district. However, the following special definitions may serve as a guide for specific types of personnel.

1) Regular Teachers

All teachers involved in the regular instructional program of the district should be included.

2) Special Teachers

All teachers who are assigned to specific duties for one of the special programs (Items 6.0,8.0, and 9.0) should by included. Additionally all teachers who serve in the regular program as itinerant teachers should be included in this category.

3) Psychologists and Social Workers

Since this category is rarely used in Texas, visiting teachers may be included in this category.

Item 6.0
8.0
& 9.0 Special attention is called to the procedure for prorating the total number of "regular" and "special" teachers (fractional time to 0.1 FTE) to each of the following programs:

Special Education
Remedial and Compensatory
Vocational and Technical

For example, suppose 10 teachers work full time with handicapped pupils with no special supplementary teachers. In this case the total FTE would be 10, all of whom would be classified as special teachers. But suppose one special teacher spends full time in this program with small groups and one-to-one tutorial work. The total then would be 11.

Another example: Suppose there are 75 pupils enrolled in the Remedial and Compensatory Program, and:

a. The pupils are grouped into three classes with a "regular" teacher for each, supplemented by 3.5 "special" teachers who move in and out working with individuals and small groups. The total FTE teachers would be 6.5 or

b. The 75 pupils are scattered in ten "regular" classes, but there are still 3.5 "special" or supplementary teachers who move in and out of the classrooms working with this "target" group of 75. If the district average ratio of pupils to "regular" teachers in the 10 classes is 25, then the 75 "compensatory" pupils should have an allotment of 3 "regular" teachers plus the 3.5 "special" ones, making a total of 6.5 FTE teachers for this program.

Count the number of FTE teachers in vocational-technical programs for only the courses designated as vocational education for which pupil enrollments are counted and prorated as pupil FTE's in Item 9.0 of Section I. Special teachers working with handicapped pupils in vocational education can be prorated in FTE's to this program.

Section III

In Section III salaries of instructional and supportive personnel may be prorated to respective programs and grade levels by the following procedures:

(1) The actual payments to personnel in proportion to FTE time distributed to each respective program as shown in

Items 4.0 thru 10.0. Round the figures to dollars.

(2) The average salary per FTE in the respective groups in Column 3 thru Column 11 of Item 3.0. Round the figures to dollars.

(3) Include payments to substitute teachers and prorate to respective programs.

(4) Prorate salaries of staff employed in the summer for administration, planning, curriculum work, etc., in connection with the regular school year but not for operation of summer school. Proration should be based on the distribution of FTE staff time to respective programs.

(5) Include payments for "extra duties" of "academic" nature. For "non-academic" duties such as bus driving, prorate to appropriate category in Section IV.

Section IV

Section IV provides for distribution of current operating expenses other than salaries of instructional and supportive staff. Salaries of other personnel are included in various categories of this section. Expenses for capital outlay and debt service for capital outlay are excluded with one exception. Transportation expenditures should include not only salaries of personnel and other operating expenses but also replacement of district-owned equipment . Contracts with outside agencies for transportation automatically include depreciation of equipment.

The current expenses in this section may be prorated to the respective programs as follows:

(1) Direct allocations and assignments such as transportation for handicapped pupils, special instructional materials and equipment, clerks and other non-instructional aides, and special food service for pre-kindergarten and kindergarten programs.

(2) Proportional distribution based on the number of FTE instructional and supportive staff in each program, such as central office staff, operation and maintenance of plant, and fixed charges.

Special service program: Item 11.0

General transportation, food service, and community services are examples that may not be prorated but held as service programs because of their special and variable nature among districts. Com-

munity services, including after-school recreation programs, driver training, and student extra-curricular activities may be treated as a special service program, depending on state-wide policy.

Definitions for Accounts:

(1) Adm., General Control & Security: Total of account 100 less salaries shown in Section III included in account 100.

(2) Instructional Supplies, Clerical, Other: Total of accounts 215,216, 220, 230, 240, and 250 less salaries shown in Section III included in these accounts.

(3) Operation and Maintenance of Plant: Total of accounts 600 and 700.

(4) Transportation: Total of account 500.

(5) Food Services: Total of account 900.

(6) Other Auxiliary Services, Including Health: Total of accounts 300 and 400 less expenditures for salaries shown in Section III included in these accounts.

(7) Fixed Charges: Total of accounts 800.

(8) Community Services: Total of accounts 1000, 1110 and 1120.

APPENDIX D:

Procedure for Computing
Program Cost Differentials

W. P. McLure
September 8, 1972

Program

4.0 Pre-K: Divide number of pupils (ADM) into total salaries in Sections III and IV.

5.0 K: Divide total current expenditures allocated according to instructions by the number of pupils in Kindergarten. In most cases the complete allocations in Section III and IV were not made, hence it was necessary to treat each case individually. In most instances the K-pupils were merged with other elementary pupils. Some districts gave limited amounts which were "add-ons," thus making the ratio above 1.0.

6.0 Total expenditures were given for the following: 6.1 (Speech Handicapped), 6.2 (Early Childhood), and 6.3 (All Other). Hence the expenditures Section III plus IV) were divided by the number of pupils (ADM). Speech handicapped (6.1) had only "add-on" expenditures (Section III and IV) given and the amounts per pupil were added to the "regular" amount per pupil. Thus, the amount per "regular" pupil included the Speech (6.1), and the remedial and compensatory (8.0) pupils in the divisor of the total "regular" expenditures.

8.0 Only "add-on" expenditures were given for these programs. Otherwise the pupils were included in the divisor to obtain the amount per "regular" pupil in elementary, middle, and high school.

9.0 Up to this point pupils were counted as full-time (head count) in ADM. In the Vocational-Technical program in item 9.0 it was necessary to convert head count (enrollments) to FTE's by counting each enrollee an FTE according to the proportion of credit load (not periods of day), and the remainder of time was counted in the "home" program which was "regular" program for all except the "handicapped" pupils.

Their "home" program was "all other-Special Education." Weightings for FTE's were as follows for number of pupils enrolled:

	Voc-Tech FTE	Regular FTE
Agriculture	.222	.778
Homemaking	.222	.778
T and I	.222	.778
Office, etc.	.222	.778
Cooperative	.444	.556
Handicapped	.444	.556 (Sp. Ed.)
CVAE	.444	.778

In most districts the financial data in Sections III and IV were total expenditures for each respective program. Thus the amount per FTE was obtained by dividing expenditures by number of FTE's. However, there were a few exceptions where some expenditures, especially non-teaching professionals in Section III and non-salary expenses in Section IV were only "add-on's" and not totals. Thus adjustments had to be made to prorate these expenses accordingly. For example, if expenses for "Operation and Maintenance" of plant were shown, it was necessary to prorate this item to the Voc-Tech FTE component as well as to the "regular" component of the respective programs.

10.0 Amounts per "regular FTE" were obtained by simply dividing the net expenditures in Sections III and IV by the number of FTE's in regular programs, including the aggregate of components in the vocational program.

Cost Per Enrollee

All costs per pupil and the indexes in all programs except the Voc-Tech programs in middle and high school are in terms of full-time pupil enrollments expressed as ADM. Thus, the indexes may be applied directly to to the respective numbers of target pupil counts in ADM.

To do the same thing for pupils in the Voc-Tech programs a revised section of Table VII shows the cost indexes per FTE and per enrollee. The indexes per enrollee can be applied directly to number of enrollments in the respective programs without going through the intermediate step of computing FTE's as was necessary in computing the differentials originally.

The procedure for converting the indexes from FTE to amount per enrollee is as follows:

Middle School		Index Per Enrollee
Agric.	.222 x 2.21 plus .778 x 1.12 =	1.37
Home.	.222 x 1.48 plus .778 x 1.12 =	1.21
T & I	.222 x 1.84 plus .778 x 1.12 =	1.29
Office	.222 x 1.67 plus .778 x 1.12 =	1.24
Coop.	.444 x 1.37 plus .778 x 1.12 =	1.23
Hand.	.444 x 2.24 plus .556 x 2.30 =	2.27
CVAE	.444 x 2.20 plus .556 x 1.12 =	1.59

High School		Index Per Enrollee
Agric.	.222 x 2.51 plus .778 x 1.28 =	1.56
Home.	.222 x 1.69 plus .778 x 1.28 =	1.38
T & I	.222 x 2.10 plus .778 x 1.28 =	1.47
Office	.222 x 1.91 plus .778 x 1.28 =	1.42
Coop.	.444 x 1.57 plus .556 x 1.28 =	1.41
Hand.	.444 x 2.56 plus .556 x 2.71 =	2.64
CVAE	.444 x 2.51 plus .556 x 1.28 =	1.82

APPENDIX E: DISTRICT DATA ITEMS INCLUDED IN COMPUTER BANK

DATA NUMBER	Data Description		Source
1.	Total needing special programs	4 yr. olds	FP-71-002
2.	"	5 yr. olds	"
3.	"	Gr. 1	"
4.	"	Gr. 2	"
5.	"	Gr. 3	"
6	"	Gr. 4	"
7.	"	Gr. 5	"
8.	"	Gr. 6	"
9.	"	Gr. 7	"
10.	"	Gr. 8	"
11.	"	Gr. 9	"
12.	"	Gr. 10	"
13.	"	Gr. 11	"
14.	"	Gr. 12	"
15.	"	Ungrad. El.	"
16.	"	Ungrad. Sec.	"
17.	Low Income (Identified)	4 yr. olds	"
18.	"	5 yr. olds	"
19.	"	Gr. 1	"
20.	"	Gr. 2	"
21.	"	Gr. 3	"
22.	"	Gr. 4	"
23.	"	Gr. 5	"
24.	"	Gr. 6	"
25.	"	Gr. 7	"
26.	"	Gr. 8	"

27.	"	Gr. 9	"
28.	"	Gr. 10	"
29.	"	Gr. 11	"
30.	"	Gr. 12	"
31.	"	Ungrad. El.	"
32.	"	Ungrad. Sec.	"
33.	Migrant (Identified)	4 yr, olds	"
34.	"	5 yr. olds	"
35.	"	Gr. 1	"
36.	"	Gr. 2	"
37.	Migrant	Gr. 3	FP-71-002
38.	"	Gr. 4	"
38.	"	Gr. 5	"
40.	"	Gr. 6	"
41.	"	Gr. 7	"
42.	"	Gr. 8	"
43.	"	Gr. 9	"
44.	"	Gr. 10	"
45.	"	Gr. 11	"
46.	"	Gr. 12	"
47.	"	Ungrad. El.	"
48.	"	Ungrad. Sec.	"
49.	Non-Standard English (Identified)	4 yr. olds	"
50.	"	5 yr. olds	"
51.	"	Gr. 1	"

52.	"	Gr. 2	"
53.	"	Gr. 3	"
54.	"	Gr. 4	"
55.	"	Gr. 5	"
56.	"	Gr. 6	"
57.	"	Gr. 7	"
58.	"	Gr. 8	"
59.	"	Gr. 9	"
60.	"	Gr. 10	"
61.	"	Gr. 11	"
62.	"	Gr. 12	"
63.	"	Ungrad. El.	"
64.	"	Ungrad. Sec.	"
65.	District Instruction Cost		Audit Tapes
66.	District Grand Total Cost	ST	Audit Tapes
67.	District Vocational Enrollment--Secondary Students	Reg. Ag.	PPA
68.	"	Coop Ag.	"
69.	"	Coop D.E.	"
70.	"	Reg. D.E.	"
71.	District Vocational Enrollment	Reg. Health	Audit Tape PPA
72.	"	Coop Health	"
73.	"	Reg. H/M	"
74.	"	Coop H/M	"
75.	"	Reg. Office	"
76.	"	Coop Office	"
77.	"	Ind. Reg.	"

78.	"	CVAE	"
79.	District Total Foundation Cost		Foundation Tapes
80.	ADM x 100	Kdgn.	SAR
81.	"	Gr. 1	"
82.	"	Gr. 2	"
83	"	Gr. 3	"
84.	"	Gr. 4	"
85.	"	Gr. 5	"
86.	"	Gr. 6	"
87.	"	Gr. 7	"
88.	"	Gr. 8	"
89.	"	Gr. 9	"
90.	"	Gr. 10	"
91.	"	Gr. 11	"
92.	"	Gr. 12	"
93.	"	Spec. Ed.	"
94.	"	Non-Grad.	"
95.	ADA x 100	Kdgn.	"
96.	"	Gr. 1	"
97.	"	Gr. 2	"
98.	"	Gr. 3	"
99.	"	Gr. 4	"
100.	"	Gr. 5	"
101.	"	Gr. 6	"
102.	"	Gr. 7	"
103.	"	Gr. 8	"
104.	"	Gr. 9	"
105.	"	Gr. 10	"
106.	"	Gr. 11	"

107.	ADA x 100	Gr. 12	SAR
108.	"	Spec. Ed.	"
109.	"	Non-Grad.	"
110.	Mid. District Voc. Ed. Enrollment	Reg. Ag.	PPA
111.	"	Coop Ag.	"
112.	"	Reg. D.E.	"
113.	"	Coop D.E.	"
114.	"	Reg. Health	"
115.	"	Coop Health	"
116.	"	Reg. H/M	"
117.	"	Coop H/M	"
118.	"	Reg. Office	"
119.	"	Coop Office	"
120.	"	Ind. Reg.	"
121.	"	CVAE	"
122.			
123.			
124.			
125.	District Enrollment	Kdgn.	SAR
126.	"	Gr. 1	"
127.	"	Gr. 2	"
128.	"	Gr. 3	"
129.	"	Gr. 4	"
130.	"	Gr. 5	"
131.	"	Gr. 6	"
132.	"	Gr. 7	"
133.	"	Gr. 8	"

134.	"	Gr. 9	"
135.	"	Gr. 10	"
136.	"	Gr. 11	"
137.	"	Gr. 12	"
138.	"	Spec. Ed.	"
139.	"	Non-Grad.	"
140.	Low-Income Actual Enrollment ELEM.		FP-71-004
141.	Low-Income Actual Enrollment JHS		FP-71-004
142.	Low-Income Actual Enrollment HS		"
143.	Migrant Enrollment	Pre Kindergarten	FP-71-006
144.	"	KDGN.	"
145.	"	Gr. 1	"
146.	"	Gr. 2	"
147.	"	Gr. 3	"
148.	"	Gr. 4	"
149.	"	Gr. 5	"
150.	"	Gr. 6	"
151.	"	Gr. 7	"
152.	"	Gr. 8	"
153.	"	Gr. 9	"
154.	"	Gr. 10	"
155.	"	Gr. 11	"
156.	"	Gr. 12	"
157.	"	Ungrad. El.	"
158.	"	Ungrad. Sec.	"
159.	Special Education Enrollment	Early Chd.	Batsell Data
160.	"	Sp. & H--EL.	"

161.	" " Middle	"
162.	" " Sec.	"
163.	" Other El.	"
164.	" " Mid.	"
165.	" " Sec.	"
166.	Kindergarten Enrollment; Non-St. Eng.	SAR P & II
167.	Elementary Enrollment "	"
168.	Middle/ High Enrollment "	"
169.	Low-Income Enrollments "	TRL "
170.	Transportation Allotment	Foundation Program Tape
171.	State Foundation School Progam Dollars	"
172.	Salary and Operations Allotment and Net State Available	"
173.	Direct Federal Revenues	TRL report
174.	Other Federal Revenues	"
175.	Expenditures for Adult Programs	Audit Tape
176.	Current Expenditures including food service and student activities	"
177.	Debt Service and Capital Outlay Expenditures	"